

# AMERICAN FRUIT GROWER

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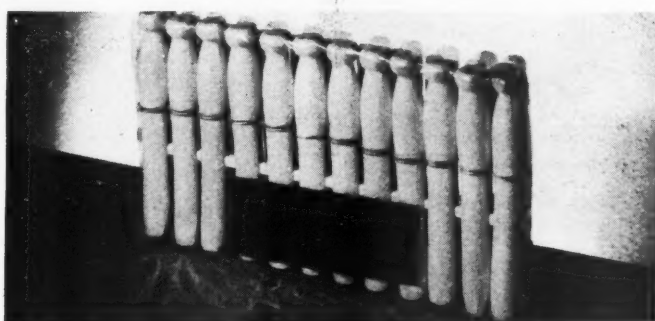
JUNE

1936

VOL. 56

THE NATIONAL FRUIT MAGAZINE

NO. 6



## STUDY THIS PICTURE BEFORE "GOING TO MARKET"

THE magic of a transparent wrapping has transformed these rows of inanimate wooden clothes pins into SUCCESSFUL SALESMEN.

The clothes pins themselves are, perhaps, no better or no worse than any other well-made wooden clothes pin BUT—

Done up in rows they stand smartly at attention, like little soldiers, and seem to say, "Madam, we are ready to serve you!"

The transparency of the modern material in which these self-confident clothes pins are wrapped permits them to display the fact that they are NEW and CLEAN. "Look," they seem to say, "see for yourself how spick and span and SANITARY we are!"

But there is still more sales psychology wrapped up in this package. Take note of its size. Two rows of smiling clothes pins, two dozen in all. Tightly, neatly, visually wrapped, they make a light, flat, oblong package, five by ten inches in size, that

readily fits a woman's hand—(that's right, you've guessed it!)—just like her pocket-

book does. There's CONVENIENCE for you!

The women folks are just naturally buying these up-to-date clothes pins ON SIGHT. And paying a higher price for them, too! Stores report they can't sell the bulk kind once women buyers have seen these modern package clothes pins.

You're wondering, of course, what clothes pins have to do with the fruit industry. Well, just this! If these little, round pieces of wood which women have always associated with wash-day drudgery, can be taken in hand by merchandising experts and transformed into STAR SALESMEN by the magic of Modern Packaging, think of the possibilities for sales promotion which this same Magic of Modern Packaging offers the fruit industry!

That's why we say to every reader of this magazine, study the above picture, small as it is, before you go to market again with your fruit products—for it may hold the secret of your future success.

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### READERS' SERVICE

The "Booklets and Catalogs for the Asking" feature published last year in the June Directory Edition will appear in the coming July issue.

AMERICAN FRUIT GROWER

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### AMERICAN FRUIT GROWER

Published Monthly by  
AMERICAN FRUIT GROWER PUBLISHING CO.  
1370 Ontario St., Cleveland, O.

#### SUBSCRIPTION RATES

Domestic, Except Cleveland, 3 years \$1.00. 1 yr. 50c.  
Cleveland and foreign (except Canada) \$1.00 per year.  
Canada, 50c per year.

Entered as second-class matter at Post Office at Cleveland, Ohio, under the Act of March 3, 1879. Additional entry at Mount Morris, Illinois.

#### CHICAGO REPRESENTATIVES

J. C. BILLINGSLEA CO.  
123 W. Madison St. Phone—Central 0465

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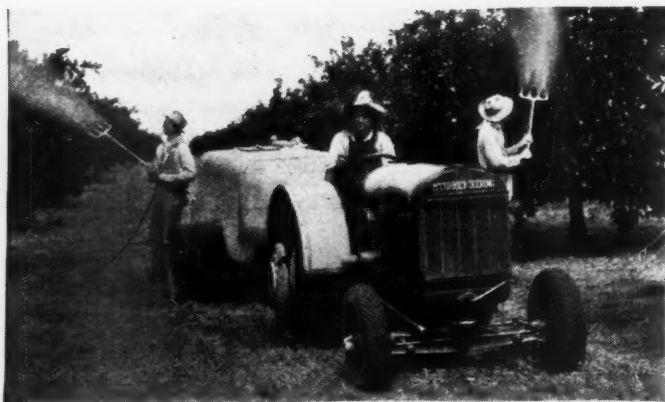
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JUNE, 1936

# INTERNATIONAL HARVESTER

## When It's Time To Buy . . .

## Invest in the BEST!



Above: Here is the long-popular McCormick-Deering 10-20 Tractor at work—operating an orchard spray rig.



Above: The McCormick-Deering T-20 Tractor—with low orchard seat—pulling a heavy offset disk harrow in a Georgia orchard.

Below: The compact McCormick-Deering 0-12 Tractor pulling a McCormick-Deering Grove Plow in a Florida grove.



IT MAY be all right to take chances on small things, but when it is time for a major step that will affect all your working days and your entire family's welfare, chance and experiment must be avoided. Your purchase of a tractor is such a step. When you invest in tractor power you want to be sure of many things. You want it to be of utmost utility the year around; to be perfectly adapted for good work with many machines; and to be of such lasting quality that it will still be handling your work years from now.

International Harvester and your McCormick-Deering dealer give you this assurance in fullest measure. Your choice of a tractor in the McCormick-Deering line—whether it be orchard tractor, regular wheel-type, crawler, or Farmall-type—is the most capable tractor that money can buy. You can bank on International Harvester experience! Thirty years of progress, with both power AND power machines, has made this Company the largest tractor builder in the world. You will get best performance, economy, and service from a McCormick-Deering tractor.

Hundreds of thousands of orchardists and farmers know that these are FACTS. Join the great majority. Consult your McCormick-Deering dealer.

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606 So. Michigan Ave.

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## McCORMICK-DEERING

# MEASURE YOUR FRUIT PACKAGING NEEDS

*by this Yardstick*

PROTECTION  
TO CONTENTS

APPEARANCE  
OF PACKAGE

CONVENIENCE  
FOR CONSUMERS

EFFICIENCY IN  
PRODUCTION

ALL-ROUND  
ECONOMY

By DEAN HALLIDAY

MODERN packaging presents a sales opportunity and a challenge to the fruit industry. It also presents a problem. That problem is the careful determination—the measuring—of the individual fruit grower's packaging needs, or an association's needs, if, as the case may be, a group of fruit growers distribute and market through an organization using an over-all brand or trade-mark.

Today the fruit grower must first realize and recognize that the magic of modern packaging is changing the whole problem of "going to market." In the old days a grower just naturally used the wooden barrel, box or basket that, by tradition, was standard practice in his part of the country. Low cost, durability and shipping convenience were the chief considerations governing the choice of container. The consumer reaction, that is, the convenience or preference of millions of housewives—the nation's food buyers—was scarcely considered. The let-them-buy-in-bulk attitude of growers and shippers paralleled the "buyer beware" warning which grew in the minds of women purchasers, after generations of buying fruit in containers that displayed the product temptingly ripe and perfect on top and green or spotted and bruised on the bottom.

Today the American housewife insists upon "seeing" what she buys before she buys, and she very much prefers to buy fruit, as well as other foods in a package or container that has been designed to fit her needs and convenience rather than that of some middleman.

Producers, packers, shippers and merchandisers of food products other than fruits, are alive to this situation,

and have been for some time. They are fully aware of today's woman buyer's preference for modern packaging, and they are very profitably capitalizing on it. If you don't believe this, go shopping with your wife and watch her consciously or subconsciously pass up bulk bacon for machine-sliced bacon done up in tempting half-pound or pound packages in a transparent protective wrapping. Watch her buy rice in an attractive, convenient-sized carton, which even has a window in it so she can see that each grain is fine and white and perfect. You can remember, of course, that—until recent years—rice, like sugar, was always scooped out of a barrel or bin. If the grocer (God bless him as an overworked individual) didn't have time to wipe the coal oil off his fingers, and the bulk rice picked up the taint of it—well, that was just extra measure, like the butcher's thumb on the meat scales.

The list of things your wife will buy in packages is endless—so why go on?

In the matter of fruit packaging, each fruit presents its own problem. There is also the factor of how you ship and to what market. Direct selling and roadside sales also enter into your packaging picture. Yet, if you will measure your fruit packaging needs by the yardstick shown at the start of this article, you can determine the factors that affect your problem.

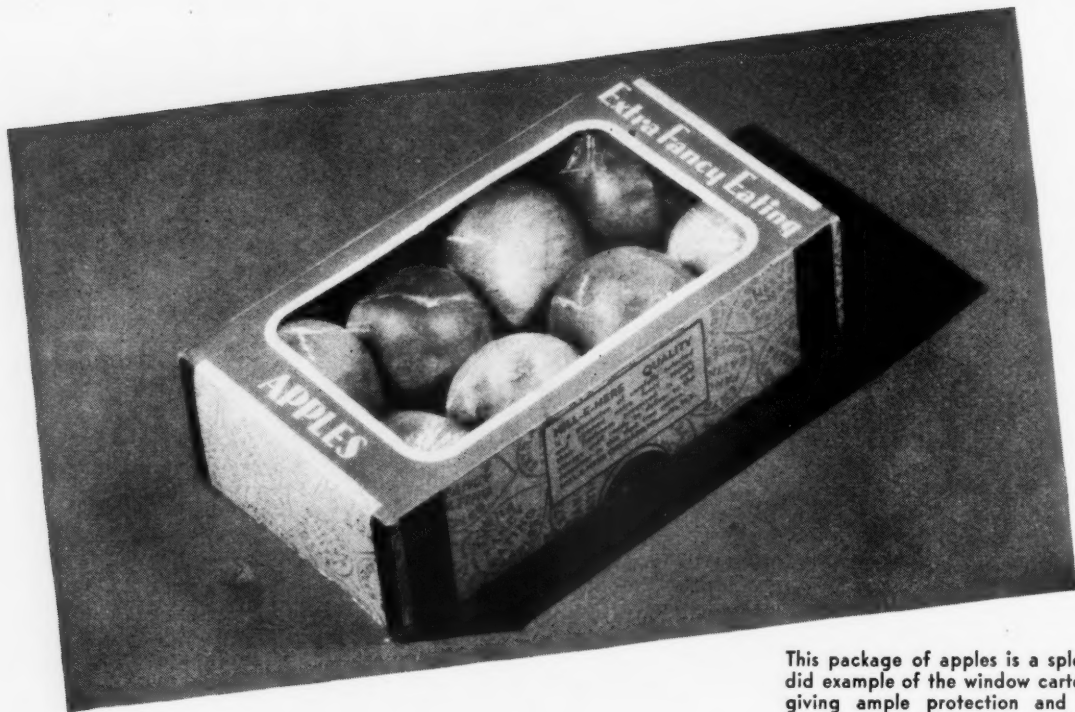
In order of importance as applied to the merchandising of fruit, these factors are as follows:

**Protection to Contents:** To you as a grower and shipper, this means a package that will protect the fruit in transit and in handling. To the consumer-buyer, protection means sanitation, protection against dust, dirt, flies and insects, as well as the soiled fingers of some hesitant buyer who wants to appraise the product by touching or handling it. Modern transparent wrappings used in various ways are the solution to this problem.

**Appearance of Package:** Fruit is excelled only by candy in its possibilities for attractive packaging. Since women "buy by eye," thought should be given to the selection of a package design, whether the container be an expensive or low cost unit. The possibilities of fitting both package and package design to a particular fruit are almost unlimited. Get all the expert advice possible on the appearance of your particular package before investing in it. Do not fool yourself into feeling that because the fruit it-

(Continued on page 17)





This package of apples is a splendid example of the window carton, giving ample protection and at the same time allowing for a clear view of the fruit.

# WINDOW CARTONS

By JONAS HOWARD

## PROTECT THE FRUIT WITHOUT OBSTRUCTING THE SALES VIEW

**O**F the recent introductions in the small-unit package field for fruit, the window carton is probably the most important. Made possible by the development of more durable transparent papers, the window carton has stepped to the front in the fruit packaging field.

A window carton for doughnuts doubled the sales of this product in a Brockton, Mass., bakery. Surely if such a result was obtained with a food product such as doughnuts, fruit, which would make a much more attractive package, cannot help but have its sales-appeal increased when packed in such a carton—which protects the fruit without obstructing the sales view.

Fruit sold in bulk or in old-fashioned containers is too often placed in an obscure corner of the retail outlet or, if given suitable space, it is not properly displayed. The use of window cartons for fruit changes it from a floor-bin stock item to a fast selling, profitable special. Such a package, with the brightly colored fruit showing through the protecting window, adds beauty to the wares of any retail store or roadside stand.

The window carton has another appeal to the buyer in that it denotes an extra effort on the part of the grower to please. In the case of perishable foods, especially, the consumer wants to see what he is buying, yet

have the product protected against contamination. This may be accomplished when the fruit is packed in the window carton.

Just as the window carton allows for vision of the product, it emphasizes the quality of the fruit so that the consumer knows what is being purchased and thus has no hesitation prompted by fear of the condition of the fruit.

From the small berry box with its transparent cover to the large carton for apples and pears, the window carton has a widespread application for all fruits. The color of the box may be blended with the color of the fruit or worked out as an artistic contrast according to the desires of the grower.

The trade of some of the larger eastern cities reported excellent sales last season of apples put up in window cartons. These were most readily sold at fruit stands, but will probably receive quick acceptance in other retail outlets as their distribution is extended.

The cartons are easily packed in a cardboard shipping container, which because of its construction lends itself to easy stacking and a minimum of space. The smaller sized

sales unit supplies the amount of fruit most readily consumed by the city dweller. When purchases are made on the bushel basis there is likely to be spoilage or shrinkage before this amount can be consumed.

For the many growers who hold their top-grade fruit in storage, the window carton allows for a distribution of a special package throughout the season. In this manner the buyer may be supplied over a longer period as the consumer demand continues for this type of package. The better type of fruit will be held over a longer marketing season under this system.

A definite place has been taken by the window carton on the fruit packaging scene and will be worth consideration by every grower for special packaging of No. 1 fruit.

As the retailer takes up the window carton and allows for proper display of this special package, there should be a greater acceptance of the package as a handy purchase unit on the part of the consumer. Whatever might be the specific market situation, it is logical that the window carton is a good investment for the fruit grower in supplying a handy package giving fruit protection as well as sales view.

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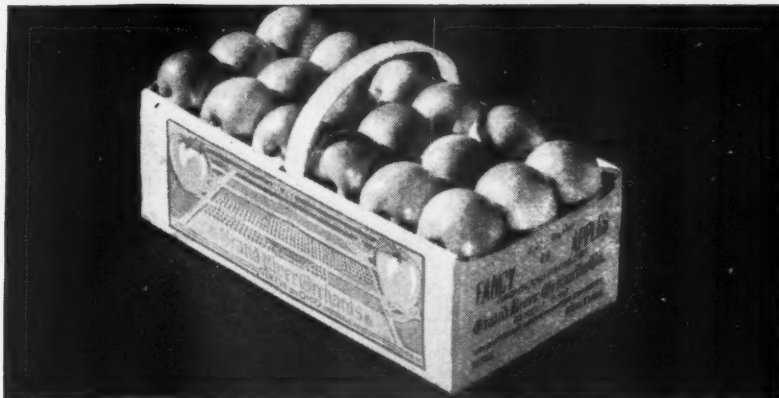
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JUNE, 1936



*Protective  
and  
Distinctive*



## PACKAGING FOR QUALITY FRUITS

By W. H. ZIPF

CHANGE is definitely taking place in the fruit packaging field—both in the matter of the larger fruits, such as apples, and particularly in the marketing of small fruits. This is clearly shown by the recent statement of H. L. W. Hill, president of the Raspberry Growers' Association of Portland, Tenn., when he said, in part, "A case of 24 half-pint cups of raspberries will bring almost as much on the Chicago market as a case of 24 pint cups." The implication is clear that the shift toward smaller containers is occurring on the larger markets.

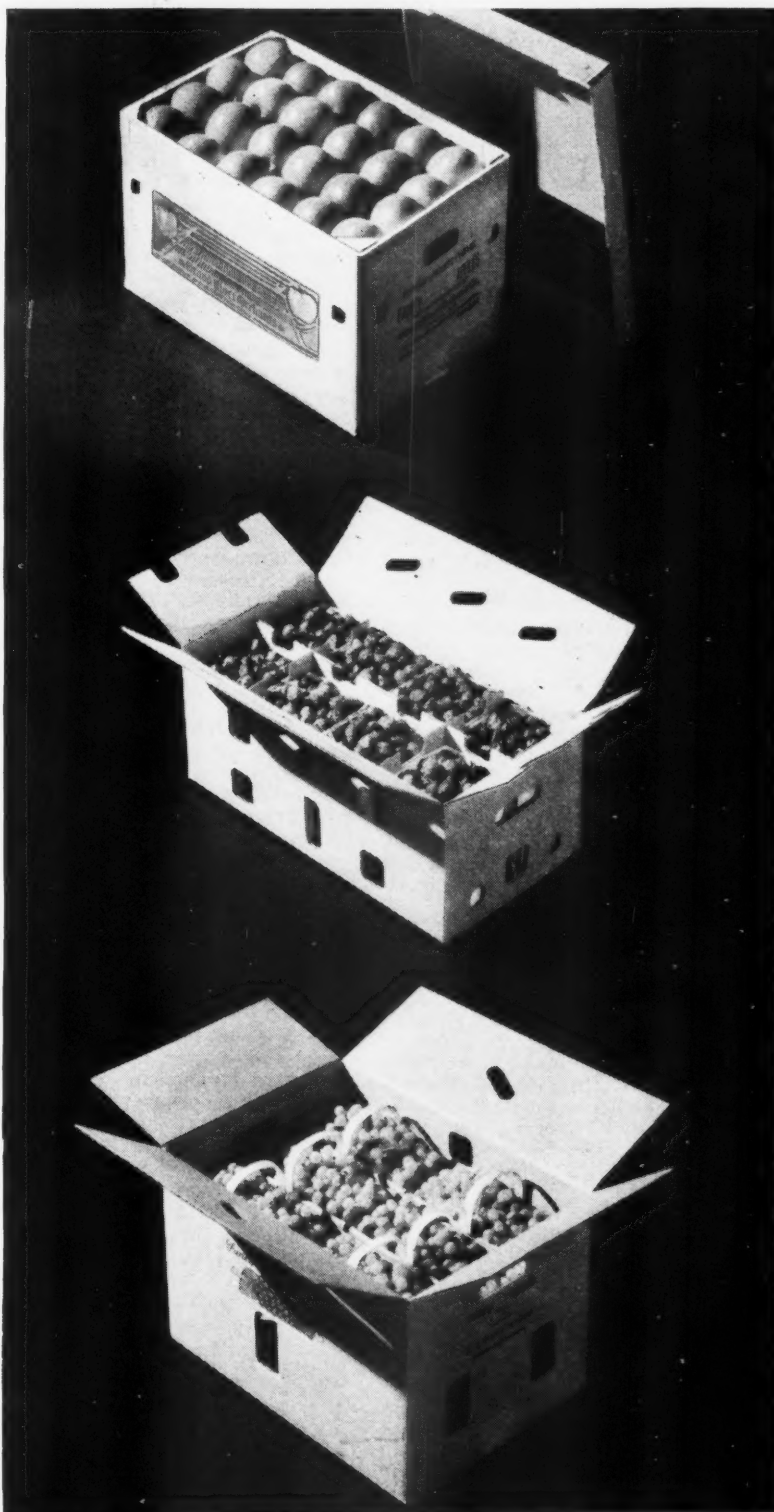
Whatever might be the change made by growers in specific sections who have a certain market demand to meet, the bulk of small fruit sales are still made in the American box for berries and the Climax basket for grapes. The American box has been retained in favor due probably to the lack of extra labor in assembling during the busy harvest season, as it comes made up, and because of good ventilation and durability. For some of the special demands, grapes are being packed in the quart American box.

In recent years there have appeared on the market many modifications of the American box. Prominent among these introductions are the paraffined cardboard box and the molded paper box. There are arguments for and against these types, and their popularity is increasing as they are being used by more growers.

With the smaller sized packages, the retail dealer and the roadside stand operator are given more leeway for displaying combination packages, which results in greater

*(Continued on page 19)*

Latest cardboard containers for all types of fruit. From top to bottom they are: The small hand-basket for apples, a bushel box for apples, shipping crate and individual boxes for berries and shipping crate and individual baskets for grapes.



# AMERICAN POMOLOGY

*A Page Conducted in the Interests of the  
American Pomological Society*

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And one representative from each affiliated State Society.

Edited by H. L. LANTZ, Secretary

## PROCEEDINGS MAILED

THE Proceedings of the A.P.S. convention held in Hartford will likely have reached our members before this issue of AMERICAN FRUIT GROWER. It contains around 300 pages and we believe it to be one of the best reports published in recent years. All paid-up members of the A.P.S. will receive a copy, which will be mailed direct from the printer at New Haven.

**MEMBERSHIPS:** We need more members. Why not induce a friend to become a member? The fee is only \$1.25 per year, and for this fee the member surely gets value received.

During the year a few life memberships have come in. Plans for a life membership campaign are under way. We ought to have a large increase in the number of life members.

**ADVERTISERS.** A considerable number of the leading orchard supply companies have generously participated in the affairs of the A.P.S. by purchasing advertising space in the Proceedings. This money is of great assistance in defraying the cost of printing, and releases other funds which are needed to meet other current expenses of the society. The officers of the society felt that inasmuch as the supply companies have a large stake in the fruit growing industry, they would be glad to have a part in financing the work of the oldest national horticultural society in the United States. The support of these supply companies is greatly appreciated and indicates their confidence in the program of the society.

## State Horticultural Societies

To date a number of the strongest and most influential state horticultural societies have taken out affiliated A.P.S. memberships. Summer meetings will soon be in order. These are becoming more popular every year. Orchardists learn much at such meetings because here the teaching and the practice are brought together. Such instruction is always rich in vivid experience.

## Fruit Crop Prospects

At the present writing the general impression is that the 1936 fruit crop will be smaller than that produced in 1935. Regardless of the size of the fruit crop, fruit growers should make every effort to produce the highest grade fruit possible. Last season's experience with markets loaded with low grade apples meant low prices throughout the season. Regardless of the size of the crop in sight, now is the time to plan to produce the best grade of fruit possible. Quality was never more important than now. At the Ohio State Horticultural Society meeting in January, Di-

## Date Set for National Apple Institute Meeting

Plans have been completed for the meeting of the Board of the National Apple Institute, to be held at the Hotel Gibson in Cincinnati, Ohio, June 15.

Future actions and policies of the Institute will be discussed and all interested are urged to attend. The meeting is scheduled to get under way at 10:00 a.m. and will last throughout the day.

On June 16 the insecticide committee will meet at the same place and it is probable that those in attendance at the Institute meeting will also take part in the insecticide session to be devoted to discussions of the lead problem.

rector V. R. Gardner of the Michigan Agricultural Experiment Station, in touching upon this point, said: "Every experienced producer knows that there is no money to be made from culls, that B-grade or second-grade fruit barely pays raising and handling costs, and that profits, if any, come from the A-grade portion of the crop. Yet the records of individual growers and of community packing houses in Michigan (and doubtless in Ohio as well) show that all the way from 20 to 80 per cent of the crop, with an average of about 50, fails to meet the A-grade specifications—the percentage varying with season, variety, age of tree, and, above all, with the individual grower. How best to reduce the proportion of small-sized, off-shaped, under-colored, limb-rubbed and otherwise inferior specimens and increase the proportion of A-grade and Fancy fruits is a problem that faces every grower.

"Studies at the Michigan station several years ago and, more recently, studies conducted at a number of the other stations, have shown that almost half of the culling done at the packing house is occasioned by small size. In a large measure, then, the approach to the reduction or elimination of culls lies in measures aimed to increase size. . . .

"I do not wish to be understood as saying that by pruning alone large size can be obtained. No method or amount of pruning will take the place of thinning when there is an overload of fruit, and there must be a reasonable amount of soil moisture and nutrients available if the trees are to grow and fruit satisfactorily. It can be said, however, that by the use of the proper pruning, thinning and soil management methods, the small apple, and consequently a major part of the cull apple, problems can be largely eliminated."

## Reliable Varieties of Nuts for Iowa

THE development of a new horticultural industry is largely dependent on the discovery, propagation and testing of superior varieties of the plant in question. The location and testing of new nut varieties is a major activity of the Northern Nut Growers' Association. D. C. Snyder of Center Point, Iowa, a member of the association, has for many years been an active and careful tester of new nut varieties under Iowa conditions. In a paper before the Rockport, Ind., meeting of the Northern Nut Growers' Association, Mr. Snyder summarized his many years of experience in nut culture and discussed the varieties he considered thoroughly reliable in Iowa.

The Winkler native hazel, the largest of that class, does well throughout the state. The catkins are hardy and the variety will bear without other varieties near for cross-pollination. Farther south and in the more arid regions to the west the catkins and even the bushes may winterkill. The European filberts are only fairly hardy, often blight badly, and their catkins are quite commonly winterkilled. The Jones hybrids are much more promising, although their catkins are killed some winters.

The Thomas black walnut is placed at the top of the list, with Stambaugh gaining in popularity. Rohwer is not considered dependable, while Stabler is not fully hardy and is unproductive. Ohio is hardy and makes a beautiful but unproductive tree.

Mr. Snyder considers the Fairbanks hickory a satisfactory variety. The tree grows easily and bears heavily and regularly even when isolated from other varieties. The nuts are large, attractive, easily cracked and good if one eats several at a time. The bitterness is most pronounced in the first nut eaten and after that it is not objectionable to most people. Children as a rule overlook this bitterness. Another native Iowa hickory which is satisfactory in Iowa and elsewhere is Stratford. The tree grows well, bears very young and is very prolific. The nuts are of good size and quality with a thin husk. Stratford grows well on bitternut, shagbark and pecan stocks. It blooms and ripens earlier than other hickories.

Pecans as a rule will not mature their nuts in Iowa, but the hicans which ripen considerably earlier may take their place. The Des Moines variety is one of the best of its class, and the trees bear earlier and heavier crops than the better known Burlington or Marquardt. This latter variety is not wholly satisfactory, being rather slow in coming into bearing and not producing heavy crops. The nuts also are not well filled, whereas the kernels of Des Moines are plump.—G. L. SLATE, Sec'y, Northern Nut Growers' Ass'n, Geneva, N.Y.



CLEAN HANDS  
AND CLEAN FRUIT

Subconsciously influence  
a customer to buy.

# Rx FOR ROADSIDE STANDS

PART II

*Fruit Well  
Displayed Is  
Half Sold*

By CHARLES W. HAUCK  
Ohio State University

MR. JOHN Q. PUBLIC is fast developing an appreciation of the highway beautiful. His interest in a fine roadbed is being matched by an interest in an attractive roadside. Moreover, he is becoming conscious of his power to control those road-sides. He is coming to a realization that the entire value of all roadside business ventures and of all advertise-ments erected along the public right-of-way is dependent upon the high-way investment which comes out of his pocket. Without the road there could be no business. If he reaches the conclusion that outdoor advertise-ments of certain kinds and in certain locations is inimical to the public in-terest, he is sure to seek means of re-stricting them. That day is approach-ing rapidly. The smart roadside mer-chant will not wait to be forced into compliance with strict regulations, but will voluntarily restrict his use of tawdry and garish displays. He will make a deliberate attempt to transform his place of business into as inviting a beauty spot as possible. Those are the spots that pack in the customers.

Attempts to blend dissimilar types of retailing into one business rarely succeed in the field of roadside mer-chandising. To illustrate, we buyers don't like to have our food products handled by a salesman with the odors of gasoline and oil on his hands and clothing. I have yet to see a successful enterprise where farm produce is dis-

played and sold at a filling station and where customers for both gasoline and fruits are served by the one at-tendant. If you decide that you must offer both auto fuel and foodstuffs, let me urge you to departmentalize the business as much as you can. Segregate the one from the other and provide separate sales persons in each department. Oil and eggs don't mix in business as successfully as in mayonnaise.

In general, quality requirements have not been as exacting in roadside selling as in other and less direct chan-nels of distribution. Some orchardists and market gardeners, for example, use their markets solely to dispose of inferior grades which cannot be sold with profit, if at all, through whole-sale outlets. It does not follow that only poor quality and ungraded prod-uce is handled at roadside markets. Many enterprising marketers offer high quality goods, and it may be said that this business is gradually attaining higher standards.

Not all roadside markets can suc-

ceed with a high quality appeal alone. Not all locations will furnish enough buyers for select grades to make the enterprise profitable. Buyers seem to fall into three general groups: first, those who insist upon fancy quality and are not repelled by high prices if the goods are satisfactory; second, those who demand fair to good quality at reasonable prices; and third, those who buy entirely on a price basis and will accept inferior quality without question if the price is low enough. The great majority of roadside buy-ing is done by the second class.

The value of extensive and neatly arranged displays in attracting cus-tomers is not universally appreciated. It has been observed that better than

(Continued on page 16)

REPELS  
INSTEAD OF  
SELLS

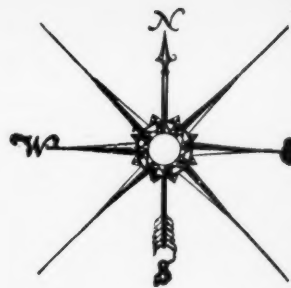
Exposed fruit and  
soiled hands  
seem to say,  
"You DON'T  
want to buy any,  
do you?"





# STATE NEWS

FROM NEAR AND FAR



**NEW YORK**—The approved eastern apple crate has become more and more widely used each season in New York and New England. It seems particularly adapted to handling the McIntosh variety, which is, of course, the principal variety in the new eastern orchard situation. McIntosh bruises badly and it is difficult to handle. By packing directly into gift crates so that no extra handling is needed, the fruits get to the market and to the consumer with much less bruising than under the old system. The approved crate is 17 by 14 by 11 inches with side pieces 10 1/4 inches high. Western New York has specified a crate 16 by 13 3/8 at the ends, with side pieces 11 1/4 inches high, feeling that this size would pack into freight cars to better advantage. There is, however, increasing interest in the approved eastern crate in the western New York area. Crates of this type are marked 1 1/8 bushels. They are not overly expensive. They make a nice package to stack, and they store well and are easily packed. All in all the open apple crate represents a splendid addition to the type packages now in use and meets a need in eastern orchards and for eastern truck shipments, which is likely to call for still further use and development.—H. B. TUKEY, New York Agricultural Experiment Station, Geneva.

**WEST VIRGINIA**—In a studied effort to give the public its apples in the most convenient, most attractive and best package, several leading West Virginia growers are working with two package types new here: the five-pound bag and the New England crate.

Spasmodic attempts have been made at boxing here for 10 years, but the results have been so nebulous that the practice has gained no real headway. The basket has almost superseded the barrel as the package for West Virginia fruit, meantime; and the straight-side "export" tub, with crowned lid, ample side-papers and lid cushions, has become the accepted basket unit. One has only to compare the old round-bottom basket jumble pack of five years ago and the expertly-crowned bushel pack today to realize the improvement. The society two years ago campaigned among its members for the "export," crowned tub.

The H. W. Millers, senior and junior, at Paw Paw, the past year worked definitely in the two new packages. Results with both the five-pound bag and crate were so satisfactory that they are planning to increase their usage of them this year. Several other growers are using the crate.—CARROLL R. MILLER, Sec'y, Martinsburg.

**PENNSYLVANIA**—Some apple growers, chiefly those shipping to New York commission men, are trying out the New England apple box. Bushels, especially tubs, are increasing and barrels are decreasing in importance with the decline in the export markets. Peaches move chiefly in bushel baskets and to a lesser extent in half-bushels. Grapes are handled in bushel and half-bushel baskets. Juice grapes go to the factory in trays. Climax baskets are used to some extent for table grapes.

Paid-up members of the State Horticultural Association who failed to receive their copy

of the Proceedings should drop a line to R. H. Sudds, State College. The regular issue was mailed on March 17, which was the date on which the big flood began. Many of these copies seem to have started for the Gulf of Mexico or the Atlantic Ocean shortly afterwards. While it may not be possible to supply everyone with a replacement, they will be sent free as long as they last. Please do not ask for a second copy unless you did not receive the first.—R. H. SUDDS, Sec'y, State College.

**RHODE ISLAND**—The packages used for fruit marketing in Rhode Island have changed radically in the last few years. The common package a few years ago for packed fruit was the tub bushel basket. The so-called "Boston Box" was used for jumble packs. A good many apples came onto the Providence market layer packed in the Boston Box; but they originated outside of the state. Few barrels have been in use for many years.

The situation this last year shows the rapid shift to the New England crate, a package holding somewhat more than a bushel, thus carrying a full bushel without requiring any tight packing. These packages are also used as storage crates. A loose or jumble pack is most common.

Apples in Cold Storage—Providence, R.I., Nov. 1, 1935

Crates	69%
Eastern (Boston) Box	5%
Basket	26%
Few Barrels	

Fruit for Sale on Wholesale Market This Season—1935-36

Crates	50%
Eastern (Boston) Box	25%
Basket	25%

The use of these crates seems likely to continue.—E. P. CHRISTOPHER, Sec'y, Kingston.

## Let Us Help You Solve YOUR Packaging Problems

Here is a symposium of news and views of the changing trend in fruit packaging as specially reported by the secretaries of the various state horticultural societies for this issue. **AMERICAN FRUIT GROWER** urges its readers to write in giving their views of the fruit industry's packaging needs. The most interesting, constructive and instructive letters on this subject will be published in future issues of the magazine. If you also want advice on the solution of your own packaging needs, write to us, briefly outlining your marketing problems.

**ILLINOIS**—The past two seasons have found the eastern gift box (New England apple crate) making its way into the package requirements of some of our Illinois growers. Last season thousands of this type of container were used in the western and northern sections of the state. Some of the biggest operators in the state packed practically their entire crop in boxes.

There are many Illinois growers who are still using the standard round bottom bushel basket. The chief reason for the majority of our growers continuing to use this style package is the low prices we have been receiving for fruit during the past few years. The flat bottom bushel basket is well liked in most of our fruit growing sections.

Many of the leading fruit growers have adopted the use of the cushion instead of the corrugated cap. This is particularly satisfactory for summer apples and peaches.—JOE B. HALE, Sec'y, Salem.

**OHIO**—While a good portion of Ohio apples are still packed in baskets, there are some growers who have taken up the New England box with enthusiasm. Growers have learned that the box will bring a better price on the active market. Commission men in the larger markets are favoring the box, and Cleveland is definitely becoming a box market.—F. H. BEACH, Sec'y, Columbus.

**UTAH**—While Utah was once classified with the Pacific Coast and intermountain states as box apple territory, this is no longer the case, nearly all of the apples now being shipped out in bushels. The box is still used to some extent for local sales, and for un-lidded shipments to the Los Angeles markets where open boxes which permit the fruit to be seen by the buyer and facilitate reconditioning after storage are preferred for Utah and Idaho Jonathans. Most box apples for the Salt Lake market are packed but not wrapped, although one grower, W. A. Cooper of Roy, uses the standard Northwest wrap pack.

Utah peaches practically all move in bushels, although substantial quantities are packed in two-layer peach boxes, unwrapped, for local market and truck hauls. All of the early peaches are so packed.

Although the suitcase and lug have been the standard packs for shipping apricots in the past, the half-bushel pack introduced the last few years is gaining in popularity and offers better promise of appealing to consumers to buy in quantities for making apricot or apricot-pineapple jam and for home canning. Locally where the Utah sweet-pit "Chinese" apricot is popular for canning and jam, bushels and lugs are commonly used also. The kernels of the sweet-pitted apricots are cracked out and added to the jam in place of almonds. Italian prunes are also popular in half-bushels, although bushels are also used. Crates and suitcases are no longer commonly used. Cherries are shipped in 13-pound flat boxes, faced or unfaced; pears in pear boxes and mainly ring-faced in bushels. The ring-face cushion is still used to some extent, but is being replaced by better ring-facing methods.

(Continued on page 18)

# “Black Leaf 40”

## “BLACK LEAF 40” IS ECONOMICAL 50 POUND DRUM Makes

**4000 gallons of spray**  
(1 pint to 100 gallons of water)

**5000 gallons of spray**  
( $\frac{3}{4}$  pint to 100 gallons of water)

**6000 gallons of spray**  
( $\frac{2}{3}$  pint to 100 gallons of water)

**8000 gallons of spray**  
( $\frac{1}{2}$  pint to 100 gallons of water)

*See Your Spray Material Dealer*



**Insist on  
ORIGINAL  
FACTORY-  
SEALED  
CONTAINERS  
for full  
strength**

**T**HE spray protection you provide to a large extent determines the quantity and quality of your fruit. If blossom time promises are to be fulfilled in profits, you must guard against attacks by Aphis, Red-Bug, Leaf-Hopper, insects which may damage foliage and dwarf or gnarl fruit. “Black Leaf 40” used alone or with other standard sprays kills these pests—by contact and by fumes.

**ADD “BLACK LEAF 40” TO CODLING MOTH SPRAYS**—“Black Leaf 40” is usable with and fortifies stomach poison or “summer-oil” codling moth sprays. Stomach poisons kill the worms after they eat. “Summer-oil” kills the eggs. “Black Leaf 40” kills mature eggs and young worms, and if lime is added, it kills adult moths. For most effective killing action fortify your codling moth sprays with “Black Leaf 40”.

**“BLACK LEAF 40” IS SAFE TO USE**—Of vegetable origin—is not caustic—does not “burn” man, horses, trees or crops. Does not injure foliage. It is concentrated, effective, easy to mix and to apply. “Black Leaf 40” is volatile and “fumes off” (evaporates) from the foliage and fruit. “Black Leaf 40” is sold by spray material dealers everywhere.

3647

# V-8 RELIABILITY CUTS LOSSES ON PERISHABLES



## That's why Fruit Growers are changing to Ford V-8 Trucks and Commercial Cars

The ability of Ford V-8 Trucks and Commercial Cars to haul heavy loads at faster speeds . . . and to stay on the job in all kinds of weather . . . is one reason for their constantly increasing popularity among fruit growers. Fresh fruit must be delivered without delay to avoid spoilage losses that eat up profits.

But even more important to the fruit grower is the OVER-ALL ECONOMY of Ford V-8 Trucks and Commercial Cars. Many owners report material

reductions in gas, oil, tire, repair and up-keep costs. Some say they have replaced big, heavy, high-cost units with Fords and are hauling the same loads with savings on taxes, license fees, capital investment and depreciation.

Why don't you try a Ford V-8 Truck or Commercial Car with your own loads, under your own operating conditions? Your Ford dealer invites you to make this "on-the-job" test without cost or obligation. Set a date for your test today!

Any new 112-inch wheelbase Ford V-8 Commercial Car can be purchased for \$25 a month, with usual down-payment. Any new 131½-inch or 157-inch wheelbase Ford V-8 Truck can be purchased with the usual down-payment on the new UCC ½% per month Finance Plans.

# FORD V-8

## TRUCKS AND COMMERCIAL CARS

## Rx FOR ROADSIDE STANDS

(Continued from page 13)

average business is enjoyed by marketers with larger than average displays. Extensive displays, of course, may cause considerable work in opening and closing the market and greater losses from deterioration of unsold produce. The ratio of losses to sales, however, may decrease with an increase in the size of the display, if the management is skillful and if increased sales resulting from the larger display permit more rapid turnover of stock.

Large packages designed primarily for shipment or for sales in wholesale quantities are not in general favor in this business. Many sales are made from bulk displays and are delivered to customers' cars either without containers or in paper bags. In fact, paper and textile bags in sizes up to one bushel capacity are used to some extent even for heavy commodities such as apples and potatoes. The development of paperboard and textile containers and newer types of wooden packages for roadside retailing has been stimulated by a demand for cheap containers which will not damage clothing or automobile upholstery.

From time to time considerable interest in co-operative roadside marketing has been manifested in certain sections of the United States. Although opportunities for successful group undertakings seem plentiful, thus far there has been only small development in this field.

The urge to co-operate in roadside marketing doubtless arises largely from the fact that many farmers are not located where they could hope to attract trade enough to justify the venture alone. By entering into an arrangement with others whereby a retail salesroom or stand may be established jointly in a favorable location, the enterprise offers greater possibilities. Of course, the usual problems of management, finance, standardization, pooling, etc., have to be solved in this type, as in other types of co-operative marketing.

I expect to see more of these co-operative businesses in the future. Certainly many of the small markets now open for only a few weeks in the year and carrying a very meager stock must be quite unprofitable. One substantial, well-managed and inviting food market formed by consolidation of several of these feeble ones would transact more business, return larger profits to each member, and at the same time displace a number of unsightly spots along the highways.

Editor's Note—The third and last article in this series will appear in the July issue.

JUNE, 1936



## MEASURE YOUR FRUIT PACKAGING NEEDS

(Continued from page 9)

self is perfect, it does not pay to enhance this beauty by attractive packaging.

**Convenience for Consumers:** Make your fruit package easy to buy by making it convenient in size. Most fruit packs for consumer purchase are too bulky. Size in itself can defeat a sale, for the simple reason that today's housewife has been educated to buy small quantities of food products frequently, rather than to "lay in a supply" in cellar or pantry. Fruit that is packed with consideration of the consumer's convenience in buying and carrying home will out-sell fruit "bulk packed"—and at better prices.

**Efficiency in Production:** A study of your individual packaging needs will result in efficiency in packing, shipping and selling. Seek a package that fits your fruit products and their selling possibilities. If necessary, change your packing methods to fit a new and better package. Don't handicap sales and profit possibilities by clinging to packing and handling methods just because "you've always done it that way."

**All-Round Economy:** Plan your packaging requirements as systematically as you do your spraying schedules. Packaging expense is a sales investment, just as spray materials are a production investment. By planning your packaging needs you can effect economies. Do not buy expensive colored labels and then find that they do not properly fit the container on which you plan to use them. Plan your packaging needs, and then buy in quantities that will give you the benefit of lower prices.

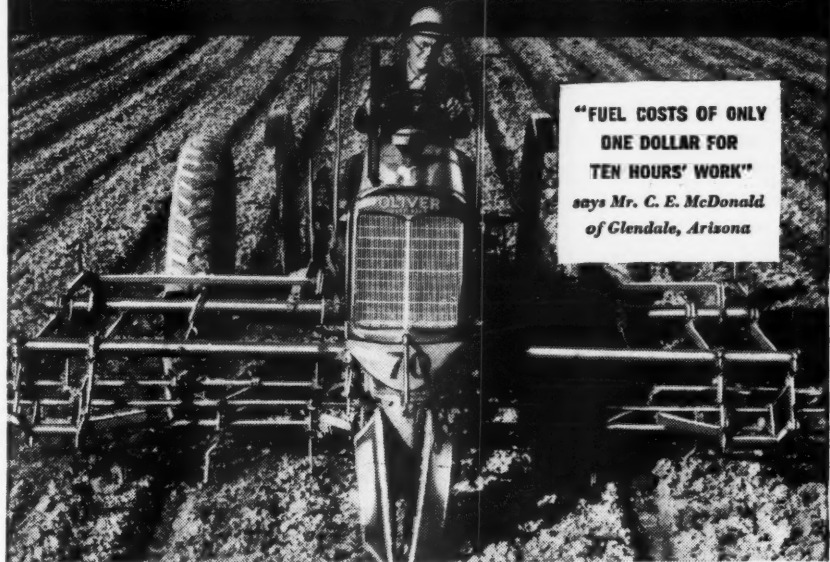
From the report of the Hammon, N. J., auction market for 1935 it is interesting to note that there were 6,990 small (36-pint) crates and 6,626 large (60-pint) crates sold over the block. The increased use of the small crate should result in a wider distribution and greater market for the small fruit crop.

In preparation for the apple movement to the East this fall railroad cars of the Western Fruit Express line are being reconditioned in the repair plant at Hillyard, Wash. More than 100 cars a day are being taken care of by the workers. During the rush season of September, October and November from 300 to 500 cars a day are reconditioned.

Kentucky, Illinois, Indiana and Missouri growers have been benefited by radio summaries of disease and insect activities broadcast in their states. On these broadcasts, suggestions are made as to spraying activities. The universities of the above-mentioned states and federal specialists are co-operating in the preparation of the material.

JUNE, 1936

# 70 OCTANE GASOLINE LOWERING TRACTOR COSTS EVERYWHERE



"FUEL COSTS OF ONLY  
ONE DOLLAR FOR  
TEN HOURS' WORK"  
says Mr. C. E. McDonald  
of Glendale, Arizona

**Lower fuel bills . . . lower oil bills . . . more power . . . faster  
work . . . with high compression and regular gasoline**

**H**IGH COMPRESSION tractors cut operating costs—use much less fuel per acre—much less oil.

Here is a letter from Mr. C. E. McDonald, of Glendale, Arizona.

"On one ranch I have cultivated seventy-five acres of lettuce with six row or three bed cultivator, equipped with six weeder knives, three furrowers and three duck feet (or a total of eighteen tools), at the rate of twenty-five acres a day, and have used twelve and one-half gallons of gasoline, costing eight cents a gallon. On my light or finishing-up cultivating I have cultivated the seventy-five acres in two days with practically the same fuel expense. I am changing my oil every five days and find that about only one quart of oil is used in the five-day period.

"My results with this tractor have

been better than I anticipated, and the fuel cost of only one dollar for ten hours' work so satisfactory that I am pleased to write you this letter."

This is the kind of performance YOU can expect from a high compression tractor. Match it against your present costs.

If you are buying a new tractor, be sure it is HIGH COMPRESSION. Otherwise, talk to your dealer about equipping your present tractor with high compression pistons or cylinder head.

It pays to buy good gasoline for cars, trucks and tractors.

Ethyl Gasoline Corporation, Chrysler Building, New York City, manufacturers of anti-knock fluids for premium and regular gasolines.

From a few seeds, found by chance in a fruit of the normally seedless-type Washington Navel orange, a new orange variety has been originated in the Citrus Experiment Station of the University of California, and is now being offered for commercial growing. Dr. Howard B. Frost states that the trees will set and mature larger crops in some of the drier citrus growing regions than are possible with the

wholly seedless Washington Navel oranges. Because of the chance finding of the original seeds, the variety has been called Trovita, which is the Esperanto word for "found." Dr. Frost also describes three new citrus fruits, two of which are hybrids between separate varieties of mandarin oranges, and the third a hybrid between a satsuma and a mandarin.

AMERICAN FRUIT GROWER

PAGE 17

## OPPORTUNITY ADS

Only 15c a Word—CASH WITH ORDER  
ADDRESS: AMERICAN FRUIT GROWER,  
1370 Ontario Street, Cleveland, Ohio

### BEEES

BEEES FOR CROSS POLLINIZING FRUIT BLOOM OR raising honey. Write for Prices. D. C. JACKSON, Funston, Georgia.

### BERRY BOXES

USE ROLLIM BERRY BOXES FOR MODERN PACKING OF FRUITS and VEGETABLES. Send for prices. Capacity seventy million annually. ROLLIM BOX COMPANY, Benton Harbor, Michigan.

### DAIRY GOATS

DAIRY GOAT JOURNAL, DEPT. 603, FAIRBURY, Nebr. Monthly Magazine, 25c yearly; 5 months 10c.

### ELECTRIC PUMPS

WORLD'S SIMPLEST ELECTRIC PUMP—ONLY 1 moving part. Nothing to wear or cause trouble. 25-foot suction lift. Operates cheaply. Money-back guarantee. Thousands satisfied users. Write for Free Catalog. Dept. 196, WESTCO CORP., Davenport, Iowa.

### FILMS

FILMS—10c PER ROLL. 120 OR 116. REFLEX, Kirksville, Missouri.

### FRUIT GRADERS

THE "BUTLER" DIVIDES FRUIT INTO ANY FOUR of seven sizes. Rings instantly interchangeable. It "Handles the Fruit with Rubber Gloves." Weighs only 200 lbs.—easily portable. All steel construction—nothing to build or assemble. Over 12 feet in length but folds to 24 inches. Handpower only \$90; electric, \$115; gasoline, \$140. WE PAY THE FREIGHT. See page 38 for details. Write for illustrated circular. BUTLER MFG. CO., Conneaut, Ohio, U.S.A.

THE HEACOCK GRADER. BUILT TO MEET EVERY Packing Requirement. Large Capacity, Careful Handling, Durable Construction, Efficient Operation, Reasonable Cost. Write for Folder and Prices. P. J. HEACOCK, Clearville, Pennsylvania.

### HOSIERY

BEAUTIFUL SILK HOSIERY, 5 PAIRS, \$1; SAMPLE 25c. DIRECTCO, AF-221 W. Broad, Savannah, Georgia.

### NURSERY STOCK

HARDY NUT TREES—BEST VARIETIES. Catalogue on request. JONES' NUT TREE NURSERY, Lancaster, Pennsylvania.

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FILMS DEVELOPED ANY SIZE, 25c COIN, INCLUDING two enlargements. CENTURY PHOTO SERVICE, Box 829, La Crosse, Wis.

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WRITE ABOUT POROUS HOSE IRRIGATING. B. & B. IRRIGATING SYSTEM, Port Clinton, Ohio.

### PRINTING

YOUR PRINTING CHOICE: LETTERHEADS, ENVELOPES, Business Cards 250—\$1.00. 50 Sets (2 envelopes) Wedding Invitations \$3.00 P.P. SEEJAY SERVICE, 2459 Station St., Chicago, Illinois.

### RHEUMATISM, NEURITIS

RHEUMATISM, NEURITIS, ACHES AND PAINS quickly relieved with Wintergreen Tablets, absolutely guaranteed. Write for free literature. Department A. THE KEENE PHARMACAL CO., Delaware & Ohio St., Indianapolis, Indiana.

### SALESMEN WANTED

CASH PAY WEEKLY FOR SALESMEN—SPARE OR Full time. Thousands make \$50.00 or more in a week SELLING STARK TREES, etc. Healthful outdoor work. Write Quick for FREE Sales Making Outfit and WEEKLY PAY Plan. No Cash or Experience needed. If you can't sell, BUY STARK TREES. WRITE FOR CATALOG. STARK NURSERY, Box C-155, Louisiana, Missouri.

### SPRAY GUNS

CUSHMAN'S MODERN SPRAY GUN. A SCIENTIFIC fog producer designed by El. B. Cushman, founder of the Cushman Motor Works, Lincoln, Nebr., and L. W. Cushman, Missouri apple grower over 20 years and patentee of first spray gun 1908. Satisfaction guaranteed. Write CUSHMAN BROS., Station A, Palo Alto, California.

### SPRAYING LIME

HIGH CALCIUM SPRAYING LIME PRODUCED AT Keosauqua, Indiana. THE FRANCE STONE COMPANY, Toledo, Ohio.

### VEGETABLE PLANTS

SWEET POTATO PLANTS. NANCY HALLS FROM treated high grade seed. Big, strong, well rooted plants. Postpaid: 500—\$1.00. 1000—\$1.75. Express paid: 3000 over—\$1.50 per 1000. Guaranteed. DOW THACKER, Box 31, Dresden, Tennessee.

PAGE 18

## STATE NEWS

(Continued from page 14)

Probably less than 10 per cent of Utah fruit is sold in roadside markets, although this method of marketing is increasing in popularity. Trucks, however, handle in the neighborhood of half the crop, mostly to nearby states of Idaho, Wyoming and Nevada, with some truck movement of apples to Los Angeles.—F. M. COE, Sec'y, Logan.

INDIANA—Added interest in fruit packages has been marked at recent meetings of fruit growers. New methods of marketing and need for economical packages have helped to bring about certain changes.

The box has been displacing the basket rather rapidly on a number of the large mid-western city markets but this result has been attributed very much to western boxed fruit. It should be safe to conclude that 90 to 95 per cent of Indiana apples and peaches were marketed in baskets in 1935.

One large grower in Indiana made boxes out of native timber for the 1935 crop but, as a rule, they were used for storage purposes only. A good point favoring the box is the increase of a given storage space by almost 20 per cent over baskets. This is important both in commercial storage rates and in home storage capacity.

Some peaches, plums and cherries are sold in Climax baskets and a few plums and cherries are sold in lugs. Grapes are sold almost entirely in Climax baskets of varying size. Package ventilation and gift packages are receiving increased consideration.—EVERETT WRIGHT, Sec'y, Lafayette.

SOUTH DAKOTA—When thinking of fruit packages in South Dakota, it might be well to consider how John Robertson of Hot Springs, a leading orchardist in this state, markets his fruit. He uses the bushel box for his apples and is pleased with it. Being off the main highway, he is unable to utilize the roadside stand idea, but many customers come to his orchard and buy their fruit direct.—W. A. SIMMONS, Sec'y, Sioux Falls.

MARYLAND—For the most part the commercial growers are not departing from the usual packages, but there is a trend from the barrel even on export shipments. Growers are guided in their selection of packages by demands of their trade, some growers having reported considerable demand and sale for smaller gift packages, either paper cartons or basket material. Possibly the greatest change occurring in commercial packages in Maryland is the use of stronger baskets with various types of crown lids, and also the "dressing up" of baskets by the use of more decorative liners with scalloped collars, cushion pads and shredded oil paper.—A. F. VIERHELLER, Sec'y, College Park.

WISCONSIN—The bushel basket is still the most widely used package for apples in Wisconsin. There is a trend, however, towards the new apple box because it is a practical package for both orchard and local market use. H. J. RAHMLOW, Sec'y, Madison.

NEBRASKA—The principal package used for apples in Nebraska is the bushel basket. The better grades and those that are to be put into cold storage generally go into flat-bottomed tub baskets, whereas the cheaper grades and those for immediate consumption are frequently put into round-bottomed baskets. Some growers have tried in a small way the knocked-down type of bushel box.

At roadside stands where people want to take apples into their automobiles, baskets are objectionable, and frequently paper sacks, both the bushel and half-bushel size, are in common use. These have the names of the growers printed on them in rather large letters. Grapes are generally sold in five-pound and 16-pound Climax baskets. HOPPERT, Sec'y, Lincoln.

ARKANSAS—While Arkansas is far from being the largest state in the Union, its different sections have such a wide variation in weather that probably a greater assortment of fruits is grown here than in any other state with the exception of California.

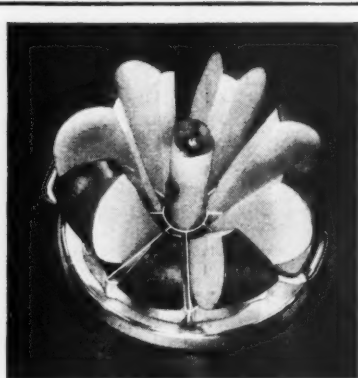
Apple growing is confined to a small section on the Ozark plateau. The peach sections are more or less scattered over the state.

Apples in Arkansas move principally in bulk to trucks.

Peaches are principally packed in bushel baskets. A few early varieties are packed in half bushels. The half bushel seems to be gaining in popularity each year.—PAUL P. BROGDON, Sec'y., Springdale.

WASHINGTON—The regular Western apple box still is the champion of fruit packages in Washington. Our small fruits generally follow the trends for packages used in the east with some growers using the paper box for berries.

CALIFORNIA—All of the apples going into marketing channels in this state, or at least most of them, are put up in the Western apple box. The lug box is the predominating cherry package and these are also being used for grapes in some sections.



### NEW

### Apple and Pear Cutter

The perfect fruit sampler for growers. Let your customers and buyers sample your product. The perfect purchase or gift for fruit consumers.

Beautifully and Strongly Made  
Quadruple Silver Plated  
Will Last a Lifetime

\$2.00 postpaid

AMERICAN FRUIT GROWER

1370 Ontario St., Cleveland, O.

## PILES DON'T BE CUT

UNTIL YOU TRY THIS  
WONDERFUL TREATMENT  
for pile suffering. If you have piles in any form write for a FREE sample of Page's Pile Tablets and you will bless the day that you read this. Write today. E. R. Page Co., 482-A5 Page Bldg., Marshall, Mich.

AMERICAN FRUIT GROWER

JUNE, 1936



## PACKAGING FOR QUALITY FRUITS

(Continued from page 11)

fruit sales. Such combination sales-boosters place a greater variety of fruits before the prospective purchaser. Also, the quantity of fruit contained in each package is readily usable by the consumer, thus cutting down spoilage.

Metal rimmed small fruit cups are being used extensively in western states and are particularly suited to long distance shipping. For western grapes, the California lug box is most commonly used. Other packages for shipping California grapes are standard drums and kegs.

A far cry from the old New England "keg" for blueberries is the attractive package in which this fruit is now sold. This package is usually made of paraffined cardboard or molded paper, shaped similar to the American box. The old-type "keg" or drum was a familiar sight in many a Yankee home and heralded the blueberry pie and cobbler season.

Crates for shipping berry boxes or grape baskets should be well-ventilated and neat-appearing. The latter may be obtained by an attractive label or stamp, the use of which will also help to keep the brand name of the fruit before the buyers.

In whatever manner the small fruit is packed, sanitary protection from the packing shed to the

kitchen must be considered. Transparent sheeting supplies such protection in an attractive manner and may be applied to any size package or type of fruit. When transparent sheeting is used the appearance of the package may be further enhanced by the use of a distinctive label. An attractive label may be made in the form of a leaf of the fruit contained in the package and printed with the brand name and the name of the grower.

The producer of fruits must ever keep the demands of his specific market in mind and package accordingly. However, quality fruit packed in sanitary, attractive containers will always find a ready market.

Peach growers of California were faced with a surplus of 6,000,000 cases of canned peaches on January 1. They immediately organized and solicited chain stores in the Midwest and East to sponsor a "National California Canned Peach Sale" which did much to move the fruit during April and May.

▲ ▲ ▲

The export market and hotel and restaurant trade in the East are demanding that apples be of uniform size. In the past growers have packed to a minimum size, but not to a maximum diameter. The latter is desired by the large-scale buyers.

▲ ▲ ▲

T. E. Anderson, veteran citrus grower and exhibitor of Lindsay, Calif., has won \$9,200 in prize money, 92 first prize cups, 400 second prize ribbons and 250 third prize ribbons in the past 25 years.

▲ ▲ ▲

An increase of from 25 to 100 per cent was noted in the strawberry plantings in the Ozark region of Arkansas. Interest in berry production in this section has been on the increase for the past two years.

▲ ▲ ▲

Of the apple export shipment from New Jersey in 1935, 70 per cent was packed in tub bushel baskets, 28 per cent in standard boxes and two per cent in standard barrels.

▲ ▲ ▲

It is estimated that 10 per cent by volume of the total apple crop is lost each year as June drop and thinnings, according to the American Chemical Society.

▲ ▲ ▲

The Rio Grande Valley in Texas is producing ribbed oranges with skins like that of cantaloupe.

AMERICAN FRUIT GROWER

## BUYS NEW LOW-PRICED DODGE TRUCK



**"MY SAVINGS IN GAS ALONE WILL PAY FOR A NEW ROOF ON THE BARN" Says C. Laney**



"BEFORE I bought my new truck, I had a showdown," writes C. Laney of Kansasville, Wisc. "I checked up on all three of the lowest-priced trucks to see which one offered the biggest dollar-for-dollar value. I picked a Dodge truck and I am certainly glad I did because my savings in gas alone will pay for a new roof on the barn. I am saving money on oil and tires, too, and I found out what people mean when they say you can't equal a Dodge for dependability. I haven't spent a penny yet for repairs."

And although a Dodge truck will save you money every mile you drive it, Dodge trucks are now priced right down with the lowest. Just think! The big, 6-cylinder, 136" W. B. Dodge chassis is now only \$505\*.

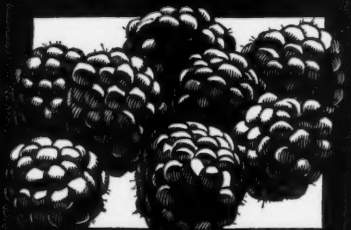
**\$370\*** AND UP

\*List prices at factory, Detroit, subject to change without notice. Special equipment, including dual wheels on 1½-ton, extra. Easy terms gladly arranged to fit your budget, at low cost, through Commercial Credit Company.

**Dependable DODGE TRUCKS**

PAGE 19

## HOW MANY



## BERRIES?

IT WOULD be impossible to calculate the number of berries that are eaten, each year, with Kellogg's Corn Flakes. Kellogg's with berries is the favorite dish of a vast number of people all over the country. So the fruit grower profits through the sale of Kellogg's.

Kellogg's Corn Flakes are nourishing and wholesome. They come to you ready to serve—save time in the kitchen. Be sure, when you buy Corn Flakes, to ask for Kellogg's by name.

**Nothing takes the place of**  
**Kellogg's**  
**CORN FLAKES**

JUNE, 1936



# BUYER'S GUIDE *for the* FRUIT FARM

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## Canning, Preserving and Juice Extracting

### Bleaching Materials

National Sulphur Co., Inc., New York, N.Y.  
Stauffer Chemical Co. of Texas, New York, N.Y.  
Virginia Smelting Co., West Norfolk, Va.

### Cans

American Can Co., New York, N.Y.  
Automatic Canning Devices, Inc., Chicago, Ill.  
Continental Can Co., Inc., New York, N.Y.  
National Can Co., Inc., New York, N.Y.  
Thompson Can Co., Dallas, Texas

### Caps and Closures

Ball Bros. Co., Muncie, Ind.  
Crown Cork & Seal Co., Baltimore, Md.  
Cupples Co., St. Louis, Mo.  
Hart Glass Mfg. Co., Dunkirk, Ind.  
Hazel-Atlas Glass Co., Wheeling, W. Va.  
Kerr Glass Mfg. Corp., Sand Springs, Okla.  
Owens-Illinois Glass Co., Toledo, Ohio  
Phoenix Metal Cap Co., Chicago, Ill.

### Clarifying Agents

American Colloid Co., Chicago, Ill.  
Hydraulic Press Mfg. Co., Mt. Gilead, Ohio  
Johns-Manville, New York, N.Y.

### Corers

Burns Mfg. Co., Syracuse, N.Y.  
F. B. Pease Co., Rochester, N.Y.

### Crushers

A. B. Farquhar Co., Ltd., York, Pa.  
Hocking Valley Mfg. Co., Lancaster, Ohio  
Hydraulic Press Mfg. Co., Mt. Gilead, Ohio  
Palmer Bros. Engines, Inc., Cos Cob, Conn.

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Increased by using cull apples for cider and vinegar. Cider and grape presses, graters, pumps, filters, supplies. Booklet F on how to keep cider sweet and make vinegar quickly free on request.

**Palmer Bros., Cos Cob, Conn.**

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### Extractors, Juice

Burns Mfg. Co., Syracuse, N.Y.  
L. O. Koven & Bro., Inc., Jersey City, N.J.  
F. H. Langsenkamp Co., Indianapolis, Ind.  
New Standard Corp., Mt. Joy, Pa.

### Filling Machinery, Bottle

Bishop & Babcock Mfg. Co., Cleveland, Ohio  
Elgin Mfg. Co., Elgin, Ill.  
Everedy Machine Co., Philadelphia, Pa.  
Karl Kiefer Machine Co., Cincinnati, Ohio  
Geo. Meyer Mfg. Co., Cudahy, Wis.  
Pneumatic Scale Corp., Quincy, Mass.

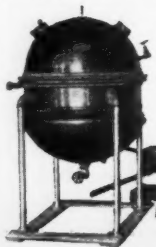
### Filters, Fruit Juice

Cuno Engineering Co., Meriden, Conn.  
Filter Paper Co., Chicago, Ill.  
Hydraulic Press Mfg. Co., Mt. Gilead, Ohio  
Johns-Manville, New York, N.Y.  
Karl Kiefer Machine Co., Cincinnati, Ohio  
Palmer Bros. Engines, Inc., Cos Cob, Conn.  
Seattle Tent & Awning Co., Seattle, Wash.  
T. Shriver & Co., Harrison, N.J.

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Hart Glass Mfg. Co., Dunkirk, Ind.  
Hazel-Atlas Glass Co., Wheeling, W. Va.  
Kerr Glass Mfg. Corp., Sand Springs, Okla.  
Owens-Illinois Glass Co., Toledo, Ohio  
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AMERICAN FRUIT GROWER

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New Jersey Agr. Works, Trenton, N.J.  
Palmer Bros. Engines, Inc., Cos Cob, Conn.  
Thomas-Albright Co., Goshen, Ind.

### Grinders

Papec Machine Co., Shortsville, N.Y.  
J. B. Sedberry, Inc., Utica, N.Y.  
Stover Mfg. & Engine Co., Freeport, Ill.  
Thomas-Albright Co., Goshen, Ind.

### Jelly Packing Pails

American Can Co., New York, N.Y.  
Menasha Wooden Ware Corp., Menasha, Wis.  
Procter Bros. & Co., Nashua, N.H.  
Wilson & Bennett Mfg. Co., Chicago, Ill.

### Kettles, Cookers and Vats

Atlas Copper & Brass Mfg. Co., Chicago, Ill.  
Brighton Copper Works, Cincinnati, Ohio  
Bucyrus Copper Kettle Works Co., Bucyrus, Ohio  
A. B. Farquhar Co., Ltd., York, Pa.  
Hamilton Copper Brass Works, Hamilton, Ohio  
Arthur Harris & Co., Chicago, Ill.  
Home Canner Mfg. Co., Hickory, N.C.  
L. O. Koven & Bro., Inc., Jersey City, N.J.  
F. H. Langsenkamp Co., Indianapolis, Ind.  
Pfaudler Co., Rochester, N.Y.

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JUNE, 1936

## CANNING, PRESERVING, JUICE EXTRACTING

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 Bashaw Co., San Francisco, Calif.  
 Commercial Iron Wks., Los Angeles, Calif.  
 Leonard Machine Wks., Lansdowne, Pa.  
 Victor Machine Wks., St. Louis, Mo.  
 Robert E. Woodson, St. Louis, Mo.

### Parers, Apple

Boutell Mfg. Co., Rochester, N.Y.  
 F. B. Pease Co., Rochester, N.Y.

### Pasteurizing Outfits

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 Glascote Co., Cleveland, Ohio  
 Heil Co., Milwaukee, Wis.  
 Hydraulic Press Mfg. Co., Mt. Gilead, Ohio  
 Pfaudler Co., Rochester, N.Y.

### Presses, Fruit

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 A. H. Hafley, Ashley, Ill.  
 Hocking Valley Mfg. Co., Lancaster, Ohio  
 Hydraulic Press Mfg. Co., Mt. Gilead, Ohio  
 New Jersey Agricultural Works, Trenton, N.J.  
 Palmer Bros. Engines, Inc., Cos Cob, Conn.  
 Thomas-Albright Co., Goshen, Ind.  
 Edwin C. Tyson, Flora Dale, Pa.  
 E. B. Van Atta & Co., Inc., Olean, N.Y.

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 Ball Bros. Co., Muncie, Ind.  
 Burpee Can Sealer Co., Chicago, Ill.  
 Home Canner Mfg. Co., Hickory, N.C.  
 L. O. Koven & Brother, Inc., Jersey City, N.J.  
 National Aluminum Mfg. Co., Peoria, Ill.  
 National Pressure Cooker Co., Eau Claire, Wis.  
 Sprague-Sells Div. of Food Machinery Corp., Hoopeston, Ill.

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 F. H. Langsenkamp Co., Indianapolis, Ind.  
 Papee Machine Co., Shortsville, N.Y.  
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 New Jersey Agricultural Works, Trenton, N.J.  
 Palmer Bros. Engines, Inc., Cos Cob, Conn.  
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 Boston Woven Hose & Rubber Co., Cambridge, Mass.  
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 National Pressure Cooker Co., Eau Claire, Wis.

### Slicers

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Carus Chemical Co., Inc., La Salle, Ill.  
 Mallinckrodt Chemical Works, St. Louis, Mo.  
 Monsanto Chemical Co., St. Louis, Mo.  
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Atlas Tool & Machine Co., Boston, Mass.  
 Dunkley Co., Kalamazoo, Mich.  
 Enterprise Mfg. Co., Philadelphia, Pa.  
 Hutley Mfg. Co., Brocton, N.Y.  
 New Standard Corp., Mt. Joy, Pa.  
 Rollman Mfg. Co., Mt. Joy, Pa.  
 Sprague-Sells Div. of Food Machinery Corp., Hoopeston, Ill.

### Stoners, Peach

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 Dunkley Co., Kalamazoo, Mich.  
 Rollman Mfg. Co., Mt. Joy, Pa.  
 L. K. Vaughan, Woodland, Calif.

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 A. B. Farquhar Co., Ltd., York, Pa.  
 Hauser-Stander Tank Co., Cincinnati, Ohio  
 Hydraulic Press Mfg. Co., Mt. Gilead, Ohio  
 Kalamazoo Tank & Silo Co., Kalamazoo, Mich.  
 Pacific Lumber Co., San Francisco, Calif.  
 Palmer Bros. Engines, Inc., Cos Cob, Conn.

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 Bristol Co., Waterbury, Conn.  
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 Palmer Co., Cincinnati, Ohio  
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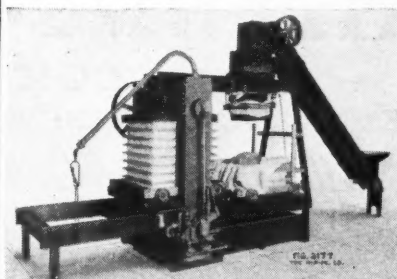
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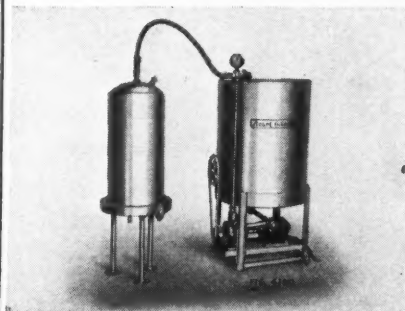
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Mount Gilead Cider Press



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 H. J. Riebe, Indianapolis, Ind.  
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 Sweeney Lynes & Co., Boston, Mass.  
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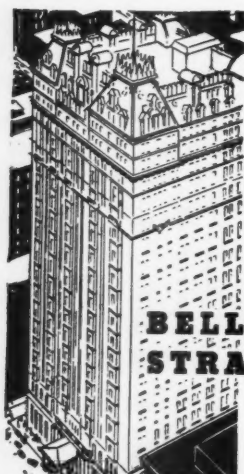
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Heidner & Co., Tacoma, Wash.  
C. C. Hess-Watson Co., New York, N.Y.  
Les Fruit De France, Paris, France  
H. M. Mathieson, Glasgow, Scotland  
Alfred W. Otis & Co., Boston, Mass.  
Pacific Fruit & Produce Co., Seattle, Wash.  
Ridley & Houlding, Ltd., London, England  
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Scioto Lime & Stone Co., Delaware, Ohio

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Tennessee Corp., Lockland, Ohio  
Tennessee Eastman Corp., Kingsport, Tenn.

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Smith Agr. Chemical Co., Columbus, Ohio  
Stimulant Laboratories, Inc., Long Island City, N.Y.

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### Nitrate of Potash

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### Nitrate of Soda

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Battelle & Renwick, New York, N.Y.  
Central Chemical Co., Inc., Baltimore, Md.  
Chilean Nitrate Sales Corp., New York, N.Y.  
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National Carbon Co., New York, N.Y.  
Philadelphia Storage Battery Co., Phila-  
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Ray-O-Vac Co., Madison, Wis.  
Universal Battery Co., Chicago, Ill.  
USL Battery Corp., Niagara Falls, N.Y.  
Willard Storage Battery Co., Cleveland,  
Ohio

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Electric Storage Battery Co., Phila-  
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Fairbanks, Morse & Co., Chicago, Ill.  
Firestone Tire & Rubber Co., Akron,  
Ohio  
Goodyear Service, Akron, Ohio  
Graybar Electric Co., New York, N.Y.  
Philadelphia Storage Battery Co., Phila-  
delphia, Pa.  
Prest-O-Lite Storage Battery Co., In-  
dianapolis, Ind.  
Universal Battery Co., Chicago, Ill.  
USL Battery Corp., Niagara Falls, N.Y.  
Westinghouse Electric & Mfg. Co., Pitts-  
burgh, Pa.  
Willard Storage Battery Co., Cleveland,  
Ohio

### Lighting Systems

Continental Motors Corp., Detroit, Mich.  
Delco Appliance Corp., Rochester, N.Y.  
Fairbanks, Morse & Co., Chicago, Ill.  
General Electric Co., Schenectady, N.Y.  
Kohler Electric Plants, Kohler Co.,  
Kohler, Wis.  
United Motors Service, Inc., Detroit,  
Mich.  
Universal Battery Co., Chicago, Ill.  
Westinghouse Electric & Mfg. Co., Pitts-  
burgh, Pa.

### Radios

Atwater Kent Mfg. Co., Philadelphia, Pa.  
Crosley Radio Corp., Cincinnati, Ohio  
Fairbanks, Morse & Co., Chicago, Ill.  
General Electric Mfg. Co., Schenectady,  
N.Y.  
Goodyear Service, Akron, Ohio  
Grunow Corp., Chicago, Ill.  
International Radio Corp., Ann Arbor,  
Mich.  
Philadelphia Storage Battery Co., Phila-  
delphia, Pa.  
RCA Mfg. Co., Inc., Camden, N.J.  
United Motors Service, Inc., Detroit,  
Mich.  
Universal Battery Co., Chicago, Ill.

### Refrigeration, Household

Crosley Radio Corp., Cincinnati, Ohio  
Fairbanks, Morse & Co., Chicago, Ill.  
Frigidaire Corp., Dayton, Ohio  
General Electric Co., Cleveland, Ohio  
Kelvinator Corp., Detroit, Mich.  
Servel, Inc., Evansville, Ind.  
Westinghouse Electric & Mfg. Co., Pitts-  
burgh, Pa.

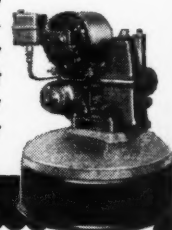
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AWAY FROM CITY MAINS**

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COMPLETE SYSTEM**

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\_\_\_\_\_ Spring \_\_\_\_\_ Deep Well \_\_\_\_\_ Cistern  
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Town \_\_\_\_\_ State \_\_\_\_\_

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Engine or Motor driven for every farm or home use



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### Stoves and Ranges

Coleman Lamp & Stove Co., Wichita, Kans.  
Florence Stove Co., Gardner, Mass.  
Kalamazoo Stove Co., Kalamazoo, Mich.  
National Enameling & Stamping Co., Milwaukee, Wis.  
Perfection Stove Co., Cleveland, Ohio  
Tappan Stove Co., Mansfield, Ohio

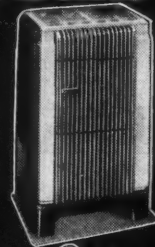
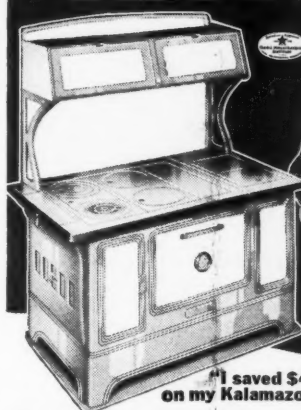
### Water Softeners

Crane Co., Chicago, Ill.  
Duro Co., Dayton, Ohio  
Elgin Softener Corp., Elgin, Ill.  
Heil Co., Milwaukee, Wis.  
Kewanee Private Utilities Co., Kewanee, Ill.  
Permutit Co., New York, N.Y.  
Solem Machine Co., Rockford, Ill.  
Trupar Mfg. Co., Dayton, Ohio  
Warlo Corp., New York, N.Y.

### Water Systems

Crane Co., Chicago, Ill.  
Deming Co., Salem, Ohio  
Fairbanks, Morse & Co., Chicago, Ill.  
Flint & Walling Mfg. Co., Kendallville, Ind.  
Goulds Pumps, Inc., Seneca Falls, N.Y.  
Heil Co., Milwaukee, Wis.  
Kewanee Private Utilities Co., Kewanee, Ill.  
F. E. Myers & Bro. Co., Ashland, Ohio  
Geo. D. Roper Corp., Rockford, Ill.  
United Motors Service, Inc., Detroit, Mich.  
Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.

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City.....State.....

## INSECT AND DISEASE CONTROL

### DUSTING EQUIPMENT Dusters

#### HAND, GUN

John Bean Mfg. Co., Lansing, Mich.  
Binks Mfg. Co., Chicago, Ill.  
E. C. Brown Co., Rochester, N.Y.  
A. B. Farquhar Co., Ltd., York, Pa.  
Feeny Mfg. Co., Muncie, Ind.  
H. D. Hudson Mfg. Co., Chicago, Ill.  
Messinger Mfg. Co., Tatamy, Pa.  
Niagara Sprayer & Chemical Co., Inc., Middleport, N.Y.  
Nico-Dust Mfg. Co., Los Angeles, Calif.  
Oakes Mfg. Co., Tipton, Ind.  
Peerless Dust Gun Co., Cleveland, Ohio  
Root Mfg. Co., Cleveland, Ohio  
D. B. Smith & Co., Utica, N.Y.

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Model 36

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Peerless Dust Gun Co.

5100 St. Clair Ave., Cleveland, Ohio

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American Cyanamid & Chemical Corp., Insecticide Dept., New York, N.Y.  
John Bean Mfg. Co., Lansing, Mich.  
Campbell-Hausfeld Co., Harrison, Ohio  
H. D. Hudson Mfg. Co., Chicago, Ill.  
Messinger Mfg. Co., Tatamy, Pa.  
Nico-Dust Mfg. Co., Los Angeles, Calif.  
D. B. Smith & Co., Utica, N.Y.

### POWER

American Cyanamid & Chemical Corp., Insecticide Dept., New York, N.Y.  
John Bacon, Inc., Gasport, N. Y.  
John Bean Mfg. Co., Lansing, Mich.  
A. B. Farquhar Co., Ltd., York, Pa.  
Feeny Mfg. Co., Muncie, Ind.  
Friend Mfg. Co., Gasport, N.Y.  
International Harvester Co., Chicago, Ill.  
Messinger Mfg. Co., Tatamy, Pa.  
Niagara Sprayer & Chemical Co., Inc., Middleport, N.Y.  
Root Mfg. Co., Cleveland, Ohio  
Shunk Mfg. Co., Bucyrus, Ohio  
Edwin C. Tyson, Flora Dale, Pa.

### DUSTING MATERIALS

#### Basic Copper Sulphate Dusts

Sherwin-Williams Co., Cleveland, Ohio

#### Fluorine Dusts

E. I. du Pont de Nemours & Co., Inc., R. & H. Chemicals Dept., Pacific Div., El Monte, Calif.

### Monohydrated Copper Sulphate Dusts

Ansbacher-Siegle Corp., Brooklyn, N.Y.  
Bowker Chemical Co., New York, N.Y.  
Chipman Chemical Co., Inc., Bound Brook, N.J.  
General Chemical Co., New York, N.Y.  
Grasselli Chemical Co., Inc., Cleveland, Ohio  
John Lucas Co., Philadelphia, Pa.  
McCormick & Co., Inc., Baltimore, Md.  
Mechling Bros. Chemical Co., Camden, N.J.  
Niagara Sprayer & Chemical Co., Inc., Middleport, N.Y.  
Sherwin-Williams Co., Cleveland, Ohio  
J. W. Woolfolk Co., Fort Valley, Ga.

## ROOT ORCHARD DUSTERS

Are easily regulated for light and heavy applications. The high air velocity creates a magnetic charge in the material causing it to cling to foliage and branches. Root Orchard Dusters are portable and can be easily mounted on any truck or conveyance. They reduce your dusting costs and make the job easier and quicker. For catalog of complete line for orchard and crop dusting, write

The Root Manufacturing Co.

1051 Power Avenue, Cleveland, Ohio

# INSECT AND DISEASE CONTROL

## Nicotine Dusts

American Nicotine Co., Henderson, Ky.  
Ansbacher-Siegle Corp., Brooklyn, N.Y.  
Bowker Chemical Co., New York, N.Y.  
California Spray-Chemical Corp., Berkeley, Calif.  
Chipman Chemical Co., Inc., Bound Brook, N.J.  
E. I. du Pont de Nemours & Co., Inc., R. & H. Chemicals Dept., Pacific Div., El Monte, Calif.  
General Chemical Co., New York, N.Y.  
Grasselli Chemical Co., Inc., Cleveland, Ohio  
Interstate Chemical Mfg. Co., Jersey City, N.J.  
John Lucas Co., Philadelphia, Pa.  
McCormick & Co., Inc., Baltimore, Md.  
Niagara Sprayer & Chemical Co., Inc., Middleport, N.Y.  
Nicotine Production Corp., Clarksville, Tenn.  
Tri-Tox Chemical Co., Washington, Ind.

## Rotenone Dusts

Ansbacher-Siegle Corp., Brooklyn, N.Y.  
Bowker Chemical Co., New York, N.Y.  
Chipman Chemical Co., Inc., Bound Brook, N.J.  
E. I. du Pont de Nemours & Co., Inc., R. & H. Chemicals Dept., Pacific Div., El Monte, Calif.  
General Chemical Co., New York, N.Y.  
Grasselli Chemical Co., Inc., Cleveland, Ohio  
John Lucas Co., Philadelphia, Pa.  
McCormick & Co., Inc., Baltimore, Md.  
Mechling Bros. Chemical Co., Camden, N.J.  
National Sulphur Co., Inc., New York, N.Y.  
Niagara Sprayer & Chemical Co., Inc., Middleport, N.Y.  
Sherwin-Williams Co., Cleveland, Ohio

## Sulphur Dusts

Ansbacher-Siegle Corp., Brooklyn, N.Y.  
Battelle and Renwick, New York, N.Y.  
Bowker Chemical Co., New York, N.Y.  
Chipman Chemical Co., Inc., Bound Brook, N.J.  
E. I. du Pont de Nemours & Co., Inc., R. & H. Chemicals Dept., Pacific Div., El Monte, Calif.

**MAGNETIC** **MAGNETIC**  
SUPER-ADHESIVE **SUPER-ADHESIVE**  
DUSTING SULPHUR DUSTING SULPHUR

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General Chemical Co., New York, N.Y.  
Grasselli Chemical Co., Inc., Cleveland, Ohio  
John Lucas Co., Philadelphia, Pa.  
McCormick & Co., Inc., Baltimore, Md.  
Mechling Bros. Chemical Co., Camden, N.J.  
Merrimac Chemical Co., Everett, Mass.  
National Sulphur Co., Inc., New York, N.Y.  
Niagara Sprayer & Chemical Co., Inc., Middleport, N.Y.  
Sherwin-Williams Co., Cleveland, Ohio  
White Tar Co. of N.J., Inc., Kearny, N.J.

## FUMIGATING EQUIPMENT

### Poles

Fulton Bag & Cotton Mills, Atlanta, Ga.  
H. D. Hudson Mfg. Co., Chicago, Ill.  
Seattle Tent & Awning Co., Seattle, Wash.

### Tanks

John Bean Mfg. Co., Lansing, Mich.  
Binks Mfg. Co., Chicago, Ill.  
Craine, Inc., Norwich, N.Y.

Mast, Foss & Co., Springfield, Ohio  
Phillips Specialties, Hartford, Mich.  
D. B. Smith & Co., Utica, N.Y.

## Tents

Bemis Bro. Bag Co., St. Louis, Mo.  
Buckeye Tent Awning & Mfg. Co., Columbus, Ohio  
Chicago Rubber Clothing Co., Racine, Wis.  
Fulton Bag & Cotton Mills, Atlanta, Ga.  
Hoosier Tarpaulin & Canvas Goods Co., Indianapolis, Ind.  
Seattle Tent & Awning Co., Seattle, Wash.  
M. D. Smith Tent & Awning Co., Atlanta, Ga.

## FUMIGATING MATERIALS

### Hydrocyanic Acid

American Cyanamid & Chemical Corp., Insecticide Dept., New York, N.Y.  
Calcyanide Co., New York, N.Y.  
E. I. du Pont de Nemours & Co., Inc., R. & H. Chemicals Dept., Pacific Div., El Monte, Calif.  
Mallinckrodt Chemical Works, St. Louis, Mo.  
Merck & Co., Rahway, N.J.

### Liquid Sulphur Dioxide

Virginia Smelting Co., West Norfolk, Va.

### Sulphurs

Mechling Bros. Chemical Co., Camden, N.J.  
Merrimac Chemical Co., Everett, Mass.  
National Sulphur Co., Inc., New York, N.Y.  
Stauffer Chemical Co. of Texas, New York, N.Y.

## ORCHARD SANITATION

### Bands, Tree

John Bacon, Inc., Gasport, N.Y.  
Bemis Bro. Bag Co., St. Louis, Mo.  
Fruit & Produce Packing, Inc., Indianapolis, Ind.  
Hinde & Dauch Paper Co., Sandusky, Ohio  
Edwin H. House, Saugatuck, Mich.  
Owens-Illinois Glass Co., Muncie, Ind.  
Tanglefoot Co., Grand Rapids, Mich.  
Edwin C. Tyson, Flora Dale, Pa.

### Beta Naphthol

American Cyanamid & Chemical Corp., Insecticide Dept., New York, N.Y.  
Sherwin-Williams Co., Cleveland, Ohio

### Insect Electrocuters

C. E. Canning Co., Inc., Chicago, Ill.  
Electric Screen Products Corp., South Bend, Ind.  
Folmer Electracing Corp., Rochester, N.Y.

### Paradichlorobenzene

Dow Chemical Co., Midland, Mich.  
General Chemical Co., New York, N.Y.  
Grasselli Chemical Co., Inc., Cleveland, Ohio  
Hooker Electro Chemical Co., New York, N.Y.  
Mallinckrodt Chemical Works, St. Louis, Mo.  
Mechling Bros. Chemical Co., Camden, N.J.  
Monsanto Chemical Co., St. Louis, Mo.  
Solvay Sales Corp., New York, N.Y.

### Rodent Destroyers

### FIREARMS

Marlin Firearms Co., New Haven, Conn.  
Remington Arms Co., Inc., Bridgeport, Conn.  
Savage Arms Co., New York, N.Y.  
Winchester Repeating Arms Co., New Haven, Conn.

### POISONS

American Cyanamid & Chemical Corp., Insecticide Dept., New York, N.Y.

AMERICAN FRUIT GROWER

Antrol Laboratories, Inc., Los Angeles, Calif.

W. P. Hammond & Son, Inc., Milwaukee, Wis.

Mallinckrodt Chemical Wks., St. Louis, Mo.  
Rat Biscuit Co., Springfield, Ohio  
Rose Rat Exterminator Co., Chicago, Ill.  
D. B. Smith & Co., Inc., Utica, N.Y.

## TRAPS

Animal Trap Co. of America, Lititz, Pa.  
Antrol Laboratories, Inc., Los Angeles, Calif.

Hawkins Co., S. Britain, Conn.  
Michigan Wire Goods Co., Niles, Mich.

## Rodent Repellents

Castle Chemical Co., Castle Rock, Minn.  
Cleveland Paper Bag Co., Cleveland, Ohio  
Dayton Treesaver Co., Dayton, Ohio  
Metasap Chemical Co., Harrison, N.J.  
A. L. Rice, Inc., Adams, N.Y.  
Shepherd Chemical Co., Cincinnati, Ohio  
D. B. Smith & Co., Inc., Utica, N.Y.  
Rollin H. Tabor, Mt. Vernon, Ohio  
Tanglefoot Co., Grand Rapids, Mich.

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• Protects your orchard and profits from the insect menace. Electrically charged grids cause instant death. No bait necessary. Operates on A.C. current only. Will not short circuit or burn out even in a heavy rain. Costs but a few cents a month to operate. Results guaranteed.

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Our experience has taught us how to chemically treat **TREE BANDS** that are guaranteed to kill the worms.

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JUNE, 1939



# INSECT AND DISEASE CONTROL

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Bartlett Mfg. Co., Detroit, Mich.  
Fruit Packing Equipment Co., Inc., Swoope, Va.  
Parma Water Lifter Co., Parma, Idaho  
Carroll R. Tiffany, Conklin, N.Y.  
Edwin C. Tyson, Flora Dale, Pa.

## Tree Guards

Brown Fence & Wire Co., Cleveland, Ohio  
Kitselman Bros., Muncie, Ind.  
Phillips Specialties, Hartford, Mich.

## Tree Healing Compounds

Clarion Development Co., Clarion, Pa.

## Weed Killers

## ARSENICAL COMPOUNDS

California Spray-Chemical Corp., Berkeley, Calif.  
General Chemical Co., New York, N.Y.  
Edwin C. Tyson, Flora Dale, Pa.

## • KILL ALL WEEDS

..... around fruit trees with the No. 99 AEROIL BURNER • Eliminates mulch for mice to work in,—protecting your trees from these and other vermin • Ideal for burning infected leaves under fruit trees, brush and strip burning, splitting rocks and boulders, destroying insect pests and 100 other practical all-year uses • Absolutely safe—easy to operate • Special Introductory Price only \$16.00 complete. Sold on 10 DAYS FREE TRIAL. One Year Guarantee • Write for folder No. 227AF describing this modern weed-killing method.



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NEW JERSEY  
**FREE TRIAL**

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E. C. Brown Co., Rochester, N.Y.  
Hauck Mfg. Co., Brooklyn, N.Y.  
Ker-O-Kil Sales Co., Gettysburg, Pa.

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Edwin C. Tyson, Flora Dale, Pa.

## LIQUID

Chipman Chemical Co., Bound Brook, N.J.  
Reade Mfg. Co., Inc., Jersey City, N.J.  
Tennessee Eastman Corp., Kingsport, Tenn.

## NON-POISONOUS COMPOUNDS

Chipman Chemical Co., Bound Brook, N.J.

## SODIUM ARSENITE

California Spray-Chemical Corp., Berkeley, Calif.  
Chipman Chemical Co., Bound Brook, N.J.  
General Chemical Co., New York, N.Y.  
Interstate Mfg. Co., Jersey City, N.J.  
Mallinckrodt Chemical Wks., St. Louis, Mo.

JUNE, 1936

## SPRAYING EQUIPMENT

### Spray Accessories

### AGITATORS

John Bean Mfg. Co., Lansing, Mich.  
Field Force Pump Co., Elmira, N.Y.  
Hardie Mfg. Co., Hudson, Mich.  
Karth Spray Equipment Co., Los Angeles, Calif.  
F. E. Myers & Bro. Co., Ashland, Ohio

### BOOMS

John Bean Mfg. Co., Lansing, Mich.  
A. B. Farquhar Co., Ltd., York, Pa.  
Field Force Pump Co., Elmira, N.Y.  
Hardie Mfg. Co., Hudson, Mich.  
F. E. Myers & Bro. Co., Ashland, Ohio

### CLOTHS, STRAINER

John Bean Mfg. Co., Lansing, Mich.  
Binks Mfg. Co., Chicago, Ill.  
Field Force Pump Co., Elmira, N.Y.  
Hardie Mfg. Co., Hudson, Mich.

### GUNS

John Bean Mfg. Co., Lansing, Mich.  
Binks Mfg. Co., Chicago, Ill.  
Campbell & Budlong Machine Works, San Jose, Calif.  
Cushman Bros., Palo Alto, Calif.  
A. B. Farquhar Co., Ltd., York, Pa.  
Field Force Pump Co., Elmira, N.Y.  
Friend Mfg. Co., Gasport, N.Y.  
W. L. Hamilton & Co., Bangor, Mich.  
Hardie Mfg. Co., Hudson, Mich.  
H. D. Hudson Mfg. Co., Chicago, Ill.  
Karth Spray Equipment Co., Los Angeles, Calif.  
F. E. Myers & Bro. Co., Ashland, Ohio

*Tours to five prize orchards in 1933 revealed four makes of sprayers, but Hamilton Guns were used in all cases!*  
*Will Hamilton*

**W. L. HAMILTON & CO.**  
BANGOR, MICHIGAN

Six Models. Better guns for less money.

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John Bean Mfg. Co., Lansing, Mich.  
Binks Mfg. Co., Chicago, Ill.  
Campbell & Budlong Machine Works, San Jose, Calif.  
Campbell-Hausfeld Co., Harrison, Ohio  
Cincinnati Rubber Mfg. Co., Cincinnati, Ohio  
Continental Rubber Works, Erie, Pa.  
Deming Co., Salem, Ohio  
Electric Hose & Rubber Co., Wilmington, Del.

A. B. Farquhar Co., Ltd., York, Pa.  
Field Force Pump Co., Elmira, N.Y.  
Goodall Rubber Co., Philadelphia, Pa.  
B. F. Goodrich Co., Akron, Ohio  
Goodyear Tire & Rubber Co., Akron, Ohio  
Hardie Mfg. Co., Hudson, Mich.  
Karth Spray Equipment Co., Los Angeles, Calif.

Manhattan Rubber Mfg. Co., Passaic, N.J.  
Mercer Rubber Co., Hamilton Square, N.J.  
Minor Rubber Co., Inc., Newark, N.J.  
Republic Rubber Co., Youngstown, Ohio  
B. C. Tillinghast Rubber Co., Philadelphia, Pa.  
U. S. Rubber Products, Inc., New York, N.Y.

## NOZZLES

John Bean Mfg. Co., Lansing, Mich.  
Binks Mfg. Co., Chicago, Ill.  
E. C. Brown Co., Rochester, N.Y.  
Champion Corp., Hammond, Ind.  
Deming Co., Salem, Ohio  
A. B. Farquhar Co., Ltd., York, Pa.  
Field Force Pump Co., Elmira, N.Y.  
Friend Mfg. Co., Gasport, N.Y.  
W. L. Hamilton & Co., Bangor, Mich.  
Hardie Mfg. Co., Hudson, Mich.  
H. D. Hudson Mfg. Co., Chicago, Ill.  
Moore Dry Kiln Co., N. Portland, Ore.  
F. E. Myers & Bro. Co., Ashland, Ohio  
Oakes Mfg. Co., Inc., Tipton, Ind.  
D. B. Smith & Co., Utica, N.Y.  
Sprayer Supply Mfg. Co., Grand Rapids, Mich.  
Woodford Hydrant Co., Des Moines, Iowa

## PRESSURE GAUGES

John Bean Mfg. Co., Lansing, Mich.  
Binks Mfg. Co., Chicago, Ill.  
A. B. Farquhar Co., Ltd., York, Pa.  
Field Force Pump Co., Elmira, N.Y.  
Hardie Mfg. Co., Hudson, Mich.  
F. E. Myers & Bro. Co., Ashland, Ohio

## RODS

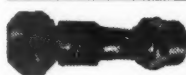
John Bean Mfg. Co., Lansing, Mich.  
Binks Mfg. Co., Chicago, Ill.  
Deming Co., Salem, Ohio  
A. B. Farquhar Co., Ltd., York, Pa.  
Field Force Pump Co., Elmira, N.Y.  
Friend Mfg. Co., Gasport, N.Y.  
W. L. Hamilton & Co., Bangor, Mich.  
Hardie Mfg. Co., Hudson, Mich.  
Messmer Brass Co., St. Louis, Mo.  
F. E. Myers & Bro. Co., Ashland, Ohio  
D. B. Smith & Co., Utica, N.Y.

## STRAINERS

John Bean Mfg. Co., Lansing, Mich.  
Binks Mfg. Co., Chicago, Ill.  
Campbell & Budlong Machine Works, San Jose, Calif.  
Campbell-Hausfeld Co., Harrison, Ohio  
A. B. Farquhar Co., Ltd., York, Pa.  
Field Force Pump Co., Elmira, N.Y.  
Hardie Mfg. Co., Hudson, Mich.  
Hydraulic Press Mfg. Co., Mt. Gilead, Ohio  
F. E. Myers & Bro. Co., Ashland, Ohio

## SWIVELS

John Bean Mfg. Co., Lansing, Mich.  
Binks Mfg. Co., Chicago, Ill.  
A. B. Farquhar Co., Ltd., York, Pa.  
Field Force Pump Co., Elmira, N.Y.  
Friend Mfg. Co., Gasport, N.Y.  
W. H. Hamilton & Co., Bangor, Mich.  
Hardie Mfg. Co., Hudson, Mich.  
C. B. Hunt & Son, Salem, Ohio  
F. E. Myers & Bro. Co., Ashland, Ohio  
A. B. Todd, Vermilion, Ohio



## Todd Perfection Hose Swivel

Make your spraying 100% easier. Hose cannot kink. Save price of SWIVEL first day. Fits any spray gun or boom. Thousands in use. Postpaid \$1.00.  
**A. B. Todd, Vermilion, Ohio**

## TOOLS

John Bean Mfg. Co., Lansing, Mich.  
Binks Mfg. Co., Chicago, Ill.  
Field Force Pump Co., Elmira, N.Y.  
Hardie Mfg. Co., Hudson, Mich.

# INSECT AND DISEASE CONTROL

## Spray Hose Fittings

John Bean Mfg. Co., Lansing, Mich.  
Binks Mfg. Co., Chicago, Ill.  
Campbell & Budlong Machine Works, San Jose, Calif.  
Campbell-Hausfeld Co., Harrison, Ohio  
Electric Hose & Rubber Co., Wilmington, Del.  
A. B. Farquhar Co., Ltd., York, Pa.  
Field Force Pump Co., Elmira, N.Y.  
Goodall Rubber Co., Philadelphia, Pa.  
Goodyear Tire & Rubber Co., Akron, Ohio  
Greenpoint Iron & Pipe Co., Inc., Brooklyn, N.Y.  
W. L. Hamilton & Co., Bangor, Mich.  
Hardie Mfg. Co., Hudson, Mich.  
C. B. Hunt & Son, Salem, Ohio  
Hydraulic Press Mfg. Co., Mt. Gilead, Ohio  
Jeffrey Mfg. Co., Columbus, Ohio  
Karth Spray Equipment Co., Los Angeles, Calif.

F. E. Myers & Bro. Co., Ashland, Ohio  
Skinner Irrigation Co., Troy, Ohio  
D. B. Smith & Co., Utica, N.Y.  
B. C. Tillinghast Rubber Co., Philadelphia, Pa.  
Waterseal Couplings, Ltd., Los Angeles, Calif.

## Spray Pumps

### HAND

John Bean Mfg. Co., Lansing, Mich.  
Binks Mfg. Co., Chicago, Ill.  
E. C. Brown Co., Rochester, N.Y.  
Campbell-Hausfeld Co., Harrison, Ohio  
Deming Co., Salem, Ohio  
W. & B. Douglas Pump Co., Philadelphia, Pa.  
A. B. Farquhar Co., Ltd., York, Pa.  
Alfred Field & Co., Inc., New York, N.Y.  
Field Force Pump Co., Elmira, N.Y.  
Friend Mfg. Co., Gasport, N.Y.  
Goulds Pumps, Inc., Seneca Falls, N.Y.  
Gulf States Chemical Co., Inc., Harlingen, Texas  
Hardie Mfg. Co., Hudson, Mich.  
H. D. Hudson Mfg. Co., Chicago, Ill.  
Mast, Foos & Co., Springfield, Ohio  
F. E. Myers & Bro. Co., Ashland, Ohio  
Niagara Sprayer & Chemical Co., Inc., Middleport, N.Y.  
Oakes Mfg. Co., Inc., Tipton, Ind.  
D. B. Smith & Co., Utica, N.Y.  
Edwin C. Tyson, Flora Dale, Pa.

### POWER

John Bean Mfg. Co., Lansing, Mich.  
Campbell & Budlong Machine Works, San Jose, Calif.  
A. B. Farquhar Co., Ltd., York, Pa.  
Field Force Pump Co., Elmira, N.Y.  
Friend Mfg. Co., Gasport, N.Y.  
Hardie Mfg. Co., Hudson, Mich.  
Karth Spray Equipment Co., Los Angeles, Calif.  
F. E. Myers & Bro. Co., Ashland, Ohio  
Niagara Sprayer & Chemical Co., Inc., Middleport, N.Y.  
Edwin C. Tyson, Flora Dale, Pa.

## Sprayer Equipment

### BEARINGS

Hyatt Roller Bearing Co., Harrison, N.J.  
New Departure Mfg. Co., Detroit, Mich.  
Timken Roller Bearing Co., Canton, Ohio

### ENGINES

Aermotor Co., Chicago, Ill.  
John Bean Mfg. Co., Lansing, Mich.  
Binks Mfg. Co., Chicago, Ill.  
J. I. Case Co., Racine, Wis.  
Caterpillar Tractor Co., Peoria, Ill.  
John Deere, Moline, Ill.  
Dempster Mill Mfg. Co., Beatrice, Nebr.  
Dultmeier Mfg. Co., Manning, Iowa  
Fairbanks, Morse & Co., Chicago, Ill.  
A. B. Farquhar Co., Ltd., York, Pa.  
Field Force Pump Co., Elmira, N.Y.  
Friend Mfg. Co., Gasport, N.Y.  
Hardie Mfg. Co., Hudson, Mich.  
Hercules Motors Corp., Canton, Ohio  
Hill Diesel Engine Co., Lansing, Mich.  
International Harvester Co., Chicago, Ill.  
Le Roi Co., Milwaukee, Wis.  
Minneapolis-Moline Power Implement Co., Minneapolis, Minn.  
F. E. Myers & Bro. Co., Ashland, Ohio  
New Idea Spreader Co., Coldwater, Ohio

New-Way Engine Co., Lansing, Mich.  
Niagara Sprayer & Chemical Co., Inc., Middleport, N.Y.  
Novo Engine Co., Lansing, Mich.  
Oliver Farm Equipment Sales Co., Chicago, Ill.  
Palmer Bros. Engines, Inc., Cos Cob, Conn.  
Stover Mfg. & Engine Co., Freeport, Ill.  
Waukesha Motor Co., Waukesha, Wis.  
Witte Engine Works, Kansas City, Mo.  
Worthington Pump & Mach. Co., Harrison, N.J.

## TANKS AND TANK FILLERS

John Bacon, Inc., Gasport, N.Y.  
John Bean Mfg. Co., Lansing, Mich.  
Binks Mfg. Co., Chicago, Ill.  
Economy Silo & Mfg. Co., Frederick, Md.  
A. B. Farquhar Co., Ltd., York, Pa.  
Field Force Pump Co., Elmira, N.Y.  
Friend Mfg. Co., Gasport, N.Y.  
Hardie Mfg. Co., Hudson, Mich.  
Heil Co., Milwaukee, Wis.  
Kalamazoo Tank & Silo Co., Kalamazoo, Mich.  
Karth Spray Equipment Co., Los Angeles, Calif.  
Kirk & Blum Mfg. Co., Cincinnati, Ohio  
F. E. Myers & Bro. Co., Ashland, Ohio  
Niagara Sprayer & Chemical Co., Inc., Middleport, N.Y.  
Phillips Specialties, Hartford, Mich.

## TIRES, PNEUMATIC

Firestone Tire & Rubber Co., Akron, Ohio  
B. F. Goodrich Co., Akron, Ohio  
Goodyear Tire & Rubber Co., Inc., Akron, Ohio  
United States Rubber Products, Inc., New York, N.Y.

## SPRAYERS - DUSTERS BEAN

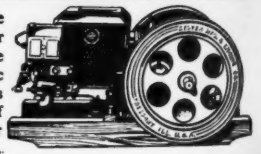
LANSING, MICH. - SAN JOSE, CALIF.  
POWER - TRACTION - HAND  
SEE PAGE AD  
IN PACKING EQUIPMENT SECTION

## EVERYTHING FOR THE ORCHARD

Wholesale and Retail  
**SPRAYERS, DUSTERS and MATERIALS**  
Power, Barrel, Hand and Knapsack Sprayers. Full line of Spray Materials and Dust Mixtures. Hand and Power Orchard and Crop Dusters. Sprayer Accessories, Guns, Rods, Nozzles and Hose. Weed Killers. Wood Preservatives, Bluestone, etc. Thermometers, Hydrometers, Hygrometers, and Magnifiers.  
**EDWIN C. TYSON, Flora Dale, Pa., U.S.A.**  
See Advs. Pages 38, 40, 41

## THE STOVER ENTIRELY ENCLOSED SELF OILING-GOOD- ENGINES

—Increase income from farm labor because they do more work at less cost. 5c worth of fuel pumps over 5000 gallons of water, and does other jobs in proportion.



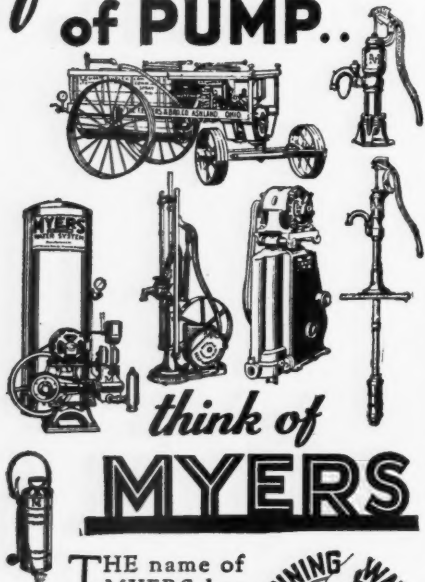
A size and style for every use. Dirt and water tight. Truck, skid or base mounted. Now is the time to replace worn engines at lowest prices.

## STOVER PUMP JACKS

and WORKING HEADS are made in a wide range of styles and sizes. Open and enclosed types for any size pump; deep or shallow wells. Quiet running. Self oiling. Accident proof. Send card for Engine and Pump Jack booklets giving capacities, etc.

STOVER MFG. & ENGINE CO., Freeport, Ill. Dept. EN-81

for Every Kind  
of PUMP..



think of  
**MYERS**

THE name of MYERS has been associated with highest quality in pumps, ever since 1870. Today the MYERS line includes Hand Pumps, Self-Oiling Power Pumps and complete Water Systems for every type of installation; Pump Jacks, Centrifugal Pumps and Sump Pumps; Spray Pumps of all kinds, from small hand outfits to the largest power rigs. Consult your local MYERS dealer on all pump problems. Mail coupon for complete descriptions of the pumps that might interest you.

**THE F. E. MYERS & BRO. CO.**  
587 Fourth Street Ashland, Ohio  
"Pump Builders Since 1870"

Send the books checked below and name of your nearest dealer:

Hand Pumps . . . <input type="checkbox"/>	Centrifugal Pumps . . . <input type="checkbox"/>
Water Systems . . . <input type="checkbox"/>	Hand Sprayers . . . <input type="checkbox"/>
Power Pumps . . . <input type="checkbox"/>	Power Sprayers . . . <input type="checkbox"/>
Pump Jacks . . . <input type="checkbox"/>	Hay Tools . . . <input type="checkbox"/>
Sump Pumps . . . <input type="checkbox"/>	Door Hangers . . . <input type="checkbox"/>

Name \_\_\_\_\_

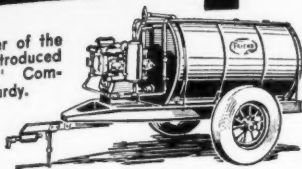
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[P-4]



## Compare the RELIABILITY

Tractor trailer of the new type introduced by "Friend." Compact and sturdy.



Before you buy a sprayer, get the answer to these questions:

Which sprayer has the fewest moving parts?

Which sprayer has the fewest places to oil and grease?

Which sprayer is easiest to keep running, and most economical?

You will find that the answer to each of these questions is "Friend."

It is the sprayer for the grower who wants results.

Built in a complete range of sizes and chassis styles. Pressures up to 800 lb.

Write for Catalog "F".

"FRIEND" MANUFACTURING CO.,  
Gasport,  
N.Y.

# "FRIEND"

SPRAYERS ■ DUSTERS

## HUDSON SPRAYERS

Every orchardist needs hand operated sprayers for those smaller jobs. The Hudson line includes compressed air and knapsack types, wheeled outfits, barrel and bucket pumps. More than 30 years' manufacturing experience back of Hudson Sprayers assures you of getting practical design and superior performance. Write for new 1936 catalog.

**H. D. HUDSON MFG. CO.**  
589 E. Illinois St., Chicago

## INSECT AND DISEASE CONTROL

### Sprayers

#### HAND

John Bacon, Inc., Gasport, N. Y.  
John Bean Mfg. Co., Lansing, Mich.  
Binks Mfg. Co., Chicago, Ill.  
E. C. Brown Co., Rochester, N. Y.  
Campbell-Hausfeld Co., Harrison, Ohio  
Champion Corp., Hammond, Ind.  
A. B. Farquhar Co., Ltd., York, Pa.  
Field Force Pump Co., Elmira, N. Y.  
Friend Mfg. Co., Gasport, N. Y.  
Hardie Mfg. Co., Hudson, Mich.  
H. D. Hudson Mfg. Co., Chicago, Ill.  
F. E. Myers & Bro. Co., Ashland, Ohio  
Niagara Sprayer & Chemical Co., Inc., Middleport, N. Y.  
Oakes Mfg. Co., Inc., Tipton, Ind.  
D. B. Smith & Co., Utica, N. Y.  
Edwin C. Tyson, Flora Dale, Pa.

#### POWER

John Bacon, Inc., Gasport, N. Y.  
John Bean Mfg. Co., Lansing, Mich.  
Campbell & Budlong Machine Works, San Jose, Calif.  
Champion Corp., Hammond, Ind.  
A. B. Farquhar Co., Ltd., York, Pa.  
Field Force Pump Co., Elmira, N. Y.  
Friend Mfg. Co., Gasport, N. Y.  
Hardie Mfg. Co., Hudson, Mich.  
Karth Spray Equipment Co., Los Angeles, Calif.  
F. E. Myers & Bro. Co., Ashland, Ohio  
Niagara Sprayer & Chemical Co., Inc., Middleport, N. Y.  
Edwin C. Tyson, Flora Dale, Pa.

#### STATIONARY

John Bean Mfg. Co., Lansing, Mich.  
Field Force Pump Co., Elmira, N. Y.  
Hardie Mfg. Co., Hudson, Mich.  
F. E. Myers & Bro. Co., Ashland, Ohio

#### TRACTION

John Bean Mfg. Co., Lansing, Mich.  
A. B. Farquhar Co., Ltd., York, Pa.  
Field Force Pump Co., Elmira, N. Y.  
Friend Mfg. Co., Gasport, N. Y.  
Hardie Mfg. Co., Hudson, Mich.  
F. E. Myers & Bro. Co., Ashland, Ohio

### Tanks

#### SPRAY MATERIAL

(See "Sprayer Equipment, Tanks and Tank Fillers")

### TOWER

John Bean Mfg. Co., Lansing, Mich.  
Binks Mfg. Co., Chicago, Ill.  
Campbell & Budlong Machine Works, San Jose, Calif.  
Field Force Pump Co., Elmira, N. Y.  
Flint & Walling Mfg. Co., Kendallville, Ind.  
Hardie Mfg. Co., Hudson, Mich.  
Heil Co., Milwaukee, Wis.  
Kalamazoo Tank & Silo Co., Kalamazoo, Mich.  
Karth Spray Equipment Co., Los Angeles, Calif.  
Kirk & Blum Mfg. Co., Cincinnati, Ohio

### WATER

John Bean Mfg. Co., Lansing, Mich.  
Binks Mfg. Co., Chicago, Ill.  
Dempster Mill Mfg. Co., Beatrice, Nebr.  
Field Force Pump Co., Elmira, N. Y.  
Hardie Mfg. Co., Hudson, Mich.  
Heil Co., Milwaukee, Wis.  
H. D. Hudson Mfg. Co., Chicago, Ill.  
Kalamazoo Tank & Silo Co., Kalamazoo, Mich.  
Kelly Pipe Co., Los Angeles, Calif.  
Kewanee Private Utilities Co., Kewanee, Ill.  
Kirk & Blum Mfg. Co., Cincinnati, Ohio  
Phillips Specialties, Hartford, Mich.

### SPRAYING MATERIALS

#### Arsenicals

#### ARSENATE OF CALCIUM

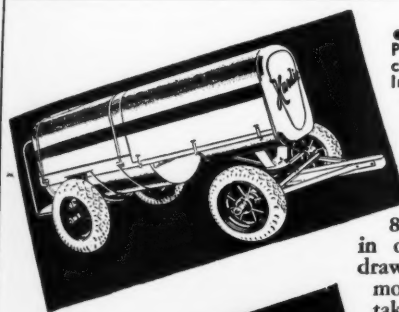
Ansbacher-Siegle Corp., Brooklyn, N. Y.  
Bowker Chemical Co., New York, N. Y.  
California Spray-Chemical Corp., Berkeley, Calif.  
Chipman Chemical Co., Inc., Bound Brook, N. J.  
Commercial Chemical Co., Memphis, Tenn.  
Corona Chemical Co., Milwaukee, Wis.  
Dow Chemical Co., Midland, Mich.  
General Chemical Co., New York, N. Y.  
Grasselli Chemical Co., Inc., Cleveland, Ohio  
Interstate Chemical Mfg. Co., Jersey City, N. J.  
John Lucas Co., Philadelphia, Pa.  
Mechling Bros. Chemical Co., Camden, N. J.  
Niagara Sprayer & Chemical Co., Inc., Middleport, N. Y.  
Sherwin-Williams Co., Cleveland, Ohio

#### ARSENATE OF LEAD

Ansbacher-Siegle Corp., Brooklyn, N. Y.  
John Bacon, Inc., Gasport, N. Y.  
Bowker Chemical Co., New York, N. Y.  
California Spray-Chemical Corp., Berkeley, Calif.  
Chipman Chemical Co., Inc., Bound Brook, N. J.  
Corona Chemical Co., Milwaukee, Wis.  
Dow Chemical Co., Midland, Mich.  
General Chemical Co., New York, N. Y.  
Grasselli Chemical Co., Inc., Cleveland, Ohio  
Interstate Chemical Mfg. Co., Jersey City, N. J.  
Latimer-Goodwin Chemical Co., Grand Junction, Colo.  
John Lucas Co., Philadelphia, Pa.  
Mechling Bros. Chemical Co., Camden, N. J.  
Niagara Sprayer & Chemical Co., Inc., Middleport, N. Y.  
Sherwin-Williams Co., Cleveland, Ohio  
Edwin C. Tyson, Flora Dale, Pa.

#### ARSENITE OF ZINC

California Spray-Chemical Corp., Berkeley, Calif.  
General Chemical Co., New York, N. Y.  
Latimer-Goodwin Chemical Co., Grand Junction, Colo.  
Sherwin-Williams Co., Cleveland, Ohio



- Really Streamlined ● Fully Armoured and Dust Proofed ● Roller Bearings on All Wheels ● Interchangeable Wood or Steel Tanks ● All Moving Parts, Including Plungers, Running in a Bath of Filtered Oil
- Short-turn Trucks ● Rubber or Steel Wheels

**WRITE** for catalog showing specialized Hardie sprayers in capacities from 3 to 50 gallons per minute, operating at 300 to 850 pounds pressure for every spraying job in orchard, grove and field. Portable horse drawn power sprayers. Tractor trailer and truck mounted sprayers with engine or with power take-off. Stationary sprayers powered by gasoline engine or electric motor. Traction and hand-operated sprayers in many models. Sprayer pumps, engines, tanks, spray guns, spray hose and fittings, parts for spray pumps, power plants, chasses, wheels, picking bags, orchard ladders.

### THE HARDIE MANUFACTURING CO.

Factories at Hudson, Mich., Portland, Ore., Los Angeles, Calif., Kansas City, Mo.

Sales and Service Offices

New York City, Brockport, N. Y., Jacksonville, Fla.

Represented by leading dealers in all fruit growing areas of the world

# HARDIE DEPENDABLE SPRAYERS

# INSECT AND DISEASE CONTROL

**for EVERY NEED**  
**PRATT'S**  
**OIL SPRAYS**  
**for EVERY PURPOSE**

• **SCALECIDE**  
The Complete Dormant Spray

• **SULFOCIDE**  
A Better Summer Fungicide

• **STRAITAR** 85% Tar Oil Emulsion  
• **SPRA-CREAM** 85% Lubricating Oil Emulsion

• **TAR-O-WASH**  
• **SUMMER OILS**

B. G. Pratt Co., Dept. 11, 50 Church St., New York

**SUNOCO**  
SELF EMULSIFYING **SPRAY**

The best of its type for control of SCALE and EUROPEAN RED MITE. Twelve years of successful use in orchards.

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Sun Oil Company, Philadelphia  
Makers of BLUE SUNOCO Motor Fuel

## Greater EFFICIENCY

Year after year, the improved crops in leading orchards testify to the increased effectiveness and safety of Ansbacher Insecticides and Fungicides.

There is a reason  
—Investigate it!

**Ansbacher-Siegle Corp.**  
Proved by **BROOKLYN, N. Y.**  
**Orchard RESULTS**

# NICHOLS

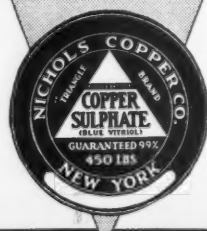
**COPPER SULPHATE**  
gives best results in home mixed  
**BORDEAUX MIXTURE**

Always uniform—99% pure!

Write for new booklet, "Bordeaux Mixture—Its Preparation and Use."

**NICHOLS COPPER CO.**  
A Unit of the Phelps Dodge Corporation  
40 WALL ST., N. Y. C. • 230 N. MICH. AVE., CHICAGO

**TRIANGLE BRAND**



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Dow Chemical Co., Midland, Mich.  
Mechling Bros. Chemical Co., Camden, N.J.

### MANGANESE ARSENATE

Grasselli Chemical Co., Inc., Cleveland, Ohio

### PARIS GREEN

Ansbacher-Siegle Corp., Brooklyn, N.Y.  
Chipman Chem. Co., Inc., Bound Brook, N.J.  
Dow Chemical Co., Midland, Mich.  
Interstate Chem. Mfg. Co., Jersey City, N.J.  
Fred L. Lavanburg, New York, N.Y.  
John Lucas Co., Philadelphia, Pa.  
Mechling Bros. Chemical Co., Camden, N.J.  
Sherwin-Williams Co., Cleveland, Ohio

### Copper Compounds

#### BASIC COPPER SULPHATE

Sherwin-Williams Co., Cleveland, Ohio

#### BORDEAUX MIXTURE

Ansbacher-Siegle Corp., Brooklyn, N.Y.  
Bowker Chemical Co., New York, N.Y.  
California Spray-Chemical Corp., Berkeley, Calif.  
Chipman Chem. Co., Inc., Bound Brook, N.J.  
Corona Chemical Co., Milwaukee, Wis.  
Dow Chemical Co., Midland, Mich.  
E. I. du Pont de Nemours & Co., Inc., R. & H. Chemicals Dept., Pacific Div., El Monte, Calif.  
General Chemical Co., New York, N.Y.  
Grasselli Chemical Co., Inc., Cleveland, Ohio  
John Lucas Co., Philadelphia, Pa.  
Mechling Bros. Chemical Co., Camden, N.J.  
Niagara Sprayer & Chemical Co., Inc., Middleport, N.Y.  
Sherwin-Williams Co., Cleveland, Ohio

#### COPPER OXIDE

Röhm & Haas Co., Philadelphia, Pa.

#### COPPER SILICATE

California Spray-Chemical Corp., Berkeley, Calif.

#### COPPER SULPHATE

General Chemical Co., New York, N.Y.  
Irrington Smelting & Refining Works, Irvington, N.J.  
Mechling Bros. Chemical Co., Camden, N.J.  
Nichols Copper Co., New York, N.Y.  
Tennessee Corp., Lockland, Ohio

### Fluorine Compounds

Grasselli Chemical Co., Inc., Cleveland, Ohio  
Kalo Co., Quincy, Ill.

### Lime

American Lime & Stone Co., Bellefonte, Pa.  
France Stone Co., Toledo, Ohio  
Kimbalton Lime Co., Inc., Shawsville, Va.  
Marble Cliff Quarries Co., Columbus, Ohio  
Ohio Hydrate & Supply Co., Woodville, Ohio  
Scioto Lime & Stone Co., Delaware, Ohio

### Nicotine Sulphate

American Nicotine Co., Henderson, Ky.  
Chipman Chemical Co., Inc., Bound Brook, N.J.  
General Chemical Co., New York, N.Y.  
Kay-Fries Chemicals, Inc., New York, N.Y.  
Nicotine Production Corp., Clarksville, Tenn.  
Tobacco By-Products & Chemical Corp., Louisville, Ky.  
Tri-Tox Chemical Co., Washington, Ind.

### Oils

#### EMULSIONS AND MISCIBLE OILS—Summer Oils, Dormant Oils, and Tar Emulsions

Ansbacher-Siegle Corp., Brooklyn, N.Y.  
Balfour, Guthrie & Co., Ltd., San Francisco, Calif.  
California Spray-Chemical Corp., Berkeley, Calif.  
Central Chemical Co., Inc., Baltimore, Md.  
Dow Chemical Co., Midland, Mich.  
E. I. du Pont de Nemours & Co., Inc., R. & H. Chemicals Dept., Pacific Div., El Monte, Calif.  
General Chemical Co., Inc., New York, N.Y.  
Grasselli Chemical Co., Inc., Cleveland, Ohio  
Mechling Bros. Chemical Co., Camden, N.J.  
National Oil Products Co., Harrison, N.J.  
Niagara Sprayer & Chemical Co., Inc., Middleport, N.Y.  
B. G. Pratt Co., New York, N.Y.  
W. T. Rawleigh Co., Freeport, Ill.  
Sherwin-Williams Co., Cleveland, Ohio  
Standard Oil Co. of Indiana, Chicago, Ill.  
Standard Oil Co. of New Jersey, New York, N.Y.  
Standard Oil Co. of Ohio, Cleveland, Ohio  
Sun Oil Co., Philadelphia, Pa.  
J. W. Woolfolk Co., Fort Valley, Ga.

### Pyrethrum and Derivatives

Chipman Chemical Co., Inc., Bound Brook, N.J.  
General Chemical Co., New York, N.Y.  
Kalo Co., Quincy, Ill.  
Kay-Fries Chemicals, Inc., New York, N.Y.  
McCormick & Co., Inc., Baltimore, Md.  
McLaughlin Gormley King Co., Minneapolis, Minn.  
Mechling Bros. Chemical Co., Camden, N.J.



**KILLS** Both chewing and sucking insects. The most highly concentrated Pyrethrum Spray on the market. Write for free spray chart.

**MCCORMICK & Co., Inc.**  
Baltimore, Md.

**PENETROL**  
and  
**NICOTROL**

Manufactured by  
**KAY-FRIES CHEMICALS, Inc.**  
180 Madison Ave., New York City  
JUNE, 1936



# How to grow "fine finish" APPLES

## STOP DISEASES WITH

### COPOSIL

A neutral copper fungicide for Apple Scab, Brooks' Fruit Spot, Bitter Rot, Blotch, and other diseases.

Rated by authorities as the safest copper spray on the market...yet highly effective.

Very economical because of the low dosage required.

Combines readily with Nicotine, Summer Oils, Arsenicals, and Rotenone Sprays.

Prevents blotching and assures "Fine Finish."

Write for 1936  
ORTHO Summer  
Spray Bulletin.



## SMOOTH COVERAGE WITH

### Ortho Spreader

A colloidal film builder which provides efficient film coverage.

An Arsenical buffer tending to prevent Arsenical injury.

Stabilizes Sulphur, preventing Black Sludge. Also prevents run-off of spray materials, thus building up heavier deposit. A real help to "Fine Finish."

## KILL INSECTS WITH

### ORTHOL-K

The proven and accepted Summer Oil Spray. Emulsion or Ready-Mix (the new emulsifiable form).

Compatible with Arsenicals, Nicotine, Fluorides, etc., and gives better control of Codling Moth.

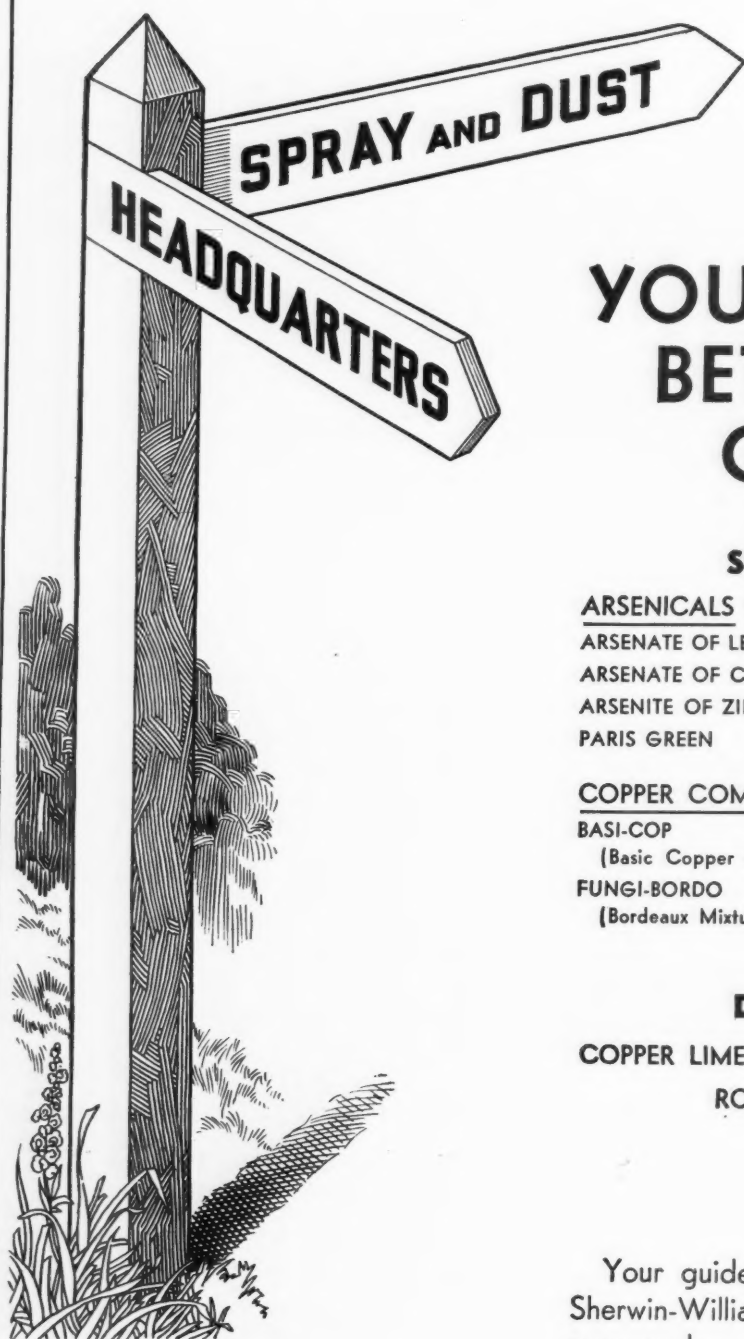
A "specific" for Codling Moth eggs. Also kills the eggs and larvae of many insects.

Efficient against Red Mites, Case Bearers, Leafhoppers, Summer Scale, and Pear Psylla.

Wide margin of safety means control without injury. Spray with ORTHOL-K for "Fine Finish."

## CALIFORNIA SPRAY-CHEMICAL CORPORATION

ELIZABETH, NEW JERSEY  
NATIONAL STOCKYARDS, ILLINOIS  
2082-B CENTER STREET, BERKELEY, CALIFORNIA



## YOUR GUIDE TO BETTER FRUIT GROWING

### SPRAYING MATERIALS

#### ARSENICALS •

ARSENATE OF LEAD  
ARSENATE OF CALCIUM  
ARSENITE OF ZINC  
PARIS GREEN

#### COPPER COMPOUNDS •

BASI-COP  
(Basic Copper Sulfate)  
FUNGI-BORDO  
(Bordeaux Mixture)

#### SULFUR COMPOUNDS •

DRY LIME SULFUR  
LIQUID LIME SULFUR  
MULSOID SULFUR

#### OILS •

SUMMER-MULSION  
FREE-MULSION  
SPRA-MULSION

#### ZINC COMPOUNDS •

ZINC SULFATE

### DUSTING MATERIALS

COPPER LIME DUSTS

SULFUR DUSTS

ROTO-DUST (ROTENONE DUST)

LITERATURE ON THE  
USE OF ANY OF THE  
ABOVE MATERIALS

FREE FOR THE ASKING

Our Spraying Service Department will be glad to mail you valuable literature on any of the above products, including our Codling Moth Control Service. This service will tell how to trap codling moths and band your trees to catch the worms.

Your guide to better fruit growing is to use Sherwin-Williams Spray and Dust Materials. Fruit growers have always recognized the "Cover the Earth" trade mark as a symbol of quality and service.

**THE SHERWIN-WILLIAMS CO.**

Insecticide Department

101 Prospect Ave.

Cleveland, Ohio

# SHERWIN-WILLIAMS SPRAY AND DUST MATERIALS





## INSECT AND DISEASE CONTROL

### Rotenone Products

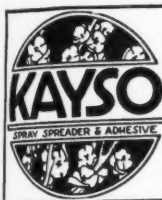
American Gypsum Co., Port Clinton, Ohio  
Chipman Chemical Co., Inc., Bound Brook, N.J.  
General Chemical Co., New York, N.Y.  
Kalo Co., Quincy, Ill.  
McCormick & Co., Inc., Baltimore, Md.  
McLaughlin Gormley King Co., Minneapolis, Minn.  
Mechling Bros. Chemical Co., Camden, N.J.

### Silicate of Soda

Grasselli Chemical Co., Inc., Cleveland, Ohio  
Philadelphia Quartz Co., Philadelphia, Pa.

### Spreaders, Soaps and Stickers

American Colloid Co., Chicago, Ill.  
American Cyanamid & Chemical Corp., Insecticide Dept., New York, N.Y.  
Ansbacher-Siegle Corp., Brooklyn, N.Y.  
California Spray-Chemical Corp., Berkeley, Calif.  
Colloidal Products Corp., San Francisco, Calif.  
Crystal Soap & Chemical Co., Inc., Philadelphia, Pa.  
Golden State Co., Ltd., San Francisco, Calif.  
Golden State Sales Corp., New York, N.Y.



When you think of spray spreaders and adhesives, think of Kayso. Dealers in all fruit sections of the country.

**GOLDEN STATE SALES CORP.**  
99 Hudson St.  
New York City, N.Y.  
**Golden State Company, Ltd.**  
San Francisco, Calif.

Grasselli Chemical Co., Inc., Cleveland, Ohio  
Kay-Fries Chemicals, Inc., New York, N.Y.  
Mechling Bros. Chemical Co., Camden, N.J.  
Monsanto Chemical Co., Rubber Service Laboratories Div., Akron, Ohio  
National Casein Co., Chicago, Ill.  
National Oil Products Co., Harrison, N. J.  
Rohm & Haas Co., Philadelphia, Pa.  
Sherwin-Williams Co., Cleveland, Ohio  
Silmo Chemical Co., Vineland, N. J.

### Sulphur

#### DRY LIME SULPHUR

Ansbacher-Siegle Corp., Brooklyn, N.Y.  
Bowker Chemical Co., New York, N.Y.  
Chipman Chemical Co., Inc., Bound Brook, N.J.  
Corona Chemical Co., Milwaukee, Wis.  
Dow Chemical Co., Midland, Mich.  
General Chemical Co., New York, N.Y.  
Grasselli Chemical Co., Inc., Cleveland, Ohio  
John Lucas Co., Philadelphia, Pa.  
Mechling Bros. Chemical Co., Camden, N.J.  
Niagara Sprayer & Chemical Co., Inc., Middleport, N.Y.  
Sherwin-Williams Co., Cleveland, Ohio

#### LIQUID LIME SULPHUR

Ansbacher-Siegle Corp., Brooklyn, N.Y.  
Bowker Chemical Co., New York, N.Y.  
California Spray-Chemical Corp., Berkeley, Calif.  
Central Chemical Co., Inc., Baltimore, Md.  
Dow Chemical Co., Midland, Mich.  
E. I. du Pont de Nemours & Co., Inc., R. & H. Chemicals Dept., Pacific Div., El Monte, Calif.  
General Chemical Co., New York, N.Y.

Grasselli Chemical Co., Inc., Cleveland, Ohio  
John Lucas Co., Philadelphia, Pa.  
Mechling Bros. Chemical Co., Camden, N.J.  
Niagara Sprayer & Chemical Co., Inc., Middleport, N.Y.  
Sanocide Spray Co., Fennville, Mich.  
Sherwin-Williams Co., Cleveland, Ohio  
J. W. Woolfolk Co., Fort Valley, Ga.

#### PINK SULPHUR

Niagara Sprayer & Chemical Co., Inc., Middleport, N. Y.

#### SOLUBLE SULPHUR

Niagara Sprayer & Chemical Co., Inc., Middleport, N.Y.

#### WETTABLE SULPHUR

American Cyanamid & Chemical Corp., Insecticide Dept., New York, N.Y.  
Ansbacher-Siegle Corp., Brooklyn, N.Y.  
Battelle & Renwick, New York, N.Y.  
California Spray-Chemical Corp., Berkeley, Calif.  
Dow Chemical Co., Midland, Mich.  
E. I. du Pont de Nemours & Co., Inc., R. & H. Chemicals Dept., Pacific Div., El Monte, Calif.  
General Chemical Co., New York, N.Y.  
Grasselli Chemical Co., Inc., Cleveland, Ohio  
John Lucas Co., Philadelphia, Pa.  
Mechling Bros. Chemical Co., Camden, N.J.  
Merrimac Chemical Co., Everett, Mass.  
National Sulphur Co., Inc., New York, N.Y.  
Niagara Sprayer & Chemical Co., Inc., Middleport, N.Y.  
Sherwin-Williams Co., Cleveland, Ohio  
Stauffer Chemical Co. of Texas, New York, N.Y.  
White Tar Co. of N.J., Inc., Kearny, N.J.  
J. W. Woolfolk Co., Fort Valley, Ga.

## MECHLING'S INSECTICIDES FUNGICIDES

### MICROSCOPIC WETTABLE SULPHUR ARSENATE OF LEAD

Scale Oil  
SSS—Sticker  
and Spreader



Air Floated  
Dusting  
Sulphur

MECHLING BROS. CHEMICAL CO.  
CAMDEN, N.J.  
EST. 1889

## MAGNETIC SPRAY WETTABLE SULPHUR

Magnetic Spray is a product of proven merit, used by successful growers everywhere for its unusual protecting qualities. Ask your dealer for "Magnetic Spray."  
**NATIONAL SULPHUR COMPANY**  
CHICAGO—420 LEX. AVE., N.Y.C.—FREEPORT, TEX.

### Zinc Compounds

#### ZINC SULPHATE

Grasselli Chemical Co., Inc., Cleveland, Ohio  
Sherwin-Williams Co., Cleveland, Ohio  
Tennessee Corp., Lockland, Ohio  
Virginia Smelting Co., West Norfolk, Va.  
J. W. Woolfolk Co., Fort Valley, Ga.

**36 % ZINC SULFATE**  
"ORIGINAL FINE 89% GRANULAR"  
VASCO-4-seed treatment  
**VIRGINIA SMELTING COMPANY**  
West Norfolk, Virginia

AMERICAN FRUIT GROWER

## IRRIGATION AND DRAINAGE

### Explosives

Atlas Powder Co., Wilmington, Del.  
E. I. du Pont de Nemours & Co., Wilmington, Del.  
Hercules Powder Co., Wilmington, Del.

### Hose, Porous

B. & B. Irrigating System, Port Clinton, Ohio  
Buckeye Tent Awning & Mfg. Co., Columbus, Ohio  
Crane Co., Chicago, Ill.  
Mantle & Mantle, Painesville, Ohio  
Oozo, Inc., Howell, Mich.  
White Showers, Inc., Detroit, Mich.

## IRRIGATION PAYS

LAKE ERIE POROUS IRRIGATION HOSE is the new hose that distributes water economically and efficiently to small fruits and vegetables.  
LAKE ERIE EYELET HOSE is the real answer to the economical watering of orchards, lawns and fields. It means better fruit at less cost. They are both long lived and treated to withstand decay. Shipped anywhere. Write for literature and prices.

### MANTLE & MANTLE PAINESVILLE, OHIO

Fruit growers and orchard supply dealers for more than a quarter century.

### Piping

W. R. Ames Co., San Francisco, Calif.  
A. M. Byers Co., Pittsburgh, Pa.  
Crane Co., Chicago, Ill.  
Dempster Mill Mfg. Co., Beatrice, Nebr.  
Flint & Walling Mfg. Co., Kendallville, Ind.  
March Automatic Irrigation Co., Muskegon, Mich.  
Mid-West Forging Co., Chicago, Ill.  
Parma Water Lifter Co., Parma, Idaho  
Skinner Irrigation Co., Troy, Ohio  
White Showers, Inc., Detroit, Mich.

## IRRIGATE! PORTABLE SURFACE PIPE

Flood, Furrow, or low-pressure Sprinkler.  
Describe your problem.

16 page illustrated folder on request.

**W. R. AMES CO. 150 Hooper Street**  
San Francisco, California

### Pumps

John Bean Mfg. Co., Lansing, Mich.  
Byron Jackson Co., Pump Div., Berkeley, Calif.  
Crane Co., Chicago, Ill.  
Decatur Pump Co., Decatur, Ill.  
Dempster Mill Mfg. Co., Beatrice, Nebr.  
Domestic Engine & Pump Co., Shippensburg, Pa.  
Fairbanks, Morse & Co., Chicago, Ill.  
Flint & Walling Mfg. Co., Kendallville, Ind.  
Goulds Pumps, Inc., Seneca Falls, N.Y.  
Heil Co., Milwaukee, Wis.  
H. D. Hudson Mfg. Co., Chicago, Ill.  
March Automatic Irrigation Co., Muskegon, Mich.  
F. E. Myers & Bro. Co., Ashland, Ohio  
Novo Engine Co., Lansing, Mich.  
Parma Water Lifter Co., Parma, Idaho  
Peerless Pump Co., Massillon, Ohio  
Geo. D. Roper Corp., Rockford, Ill.  
United Motors Service, Inc., Detroit, Mich.  
Westco Pump Corp., Davenport, Iowa  
Witte Engine Works, Kansas City, Mo.  
Worthington Pump & Machinery Corp., Harrison, N.J.

### Rams, Hydraulic

Goulds Pumps, Inc., Seneca Falls, N.Y.  
March Automatic Irrigation Co., Muskegon, Mich.  
Rife Hydraulic Engine Mfg. Co., New York, N.Y.  
Rife Ram and Pump Wks., Waynesboro, Va.

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Get **FREE TREE** Offer—Quick!

## NEW, and Luscious U-S-PATENT Fruits STARK BRO'S are Giving the World!



### YOU Can Grow Glorious Crops of these in Your Own Home Orchard

All exclusive Stark Fruits—amazing **NEW** flavors, great size, transcendent beauty. The **NEW**, and **U. S. PATENTED FRUITS** Stark Bro's present to the world—**STARKING Apple**, sensational **NEW** Double-Red Delicious—**MONTEARLY Cherry**, Earliest Ripening tart cherry (Awarded U. S. Patent)—**Stark-Burbank "ELEPHANT HEART" Plum**, World's Largest, finest **FREESTONE**, Blood-Fleshed Plum—huge, New, **HAL-BERTA GIANT Peach**, World's First **U. S. PATENTED PEACH**—and many more.

### New PRIZE FRUIT Book of Stark's Fruit Marvels—FREE

Most Beautiful **FRUIT** and **SHRUB** BOOK ever produced. **Natural Color Pictures** of **ALL NEW STARK-BURBANK FRUITS, ROSES** (including **NEW U. S. Patented Burbank GOLDEN SUNSET Climbing Rose**), **SHRUBS AWARDED U. S. PATENTS**. Every page filled with **Truthful Descriptions**—and inspiring stories of **Orchard Success** secured by planting Stark Trees. Send Coupon for **FREE** Copy Today. Address Box 89.

### STARK BRO'S NURSERIES at LOUISIANA, MO., for 120 Years

**Farmer Earns \$26260  
in Month's Spare Time**



#### SELLING STARK TREES

J. M. Robinson (photo), Mass. farmer, recently was **PAID \$262.50 FOR HIS SPARE TIME** in ONE MONTH selling Stark Trees to neighbors. He often makes \$200.00 sales in a week.

**YOU**, too, would enjoy this **Healthful, Outdoor Work** with **CASH PAY WEEKLY** and Extra Cash and Rich Merchandise **Prizes Weekly**. **FREE Selling Outfit**. **WRITE QUICK**—get our **New, Extra Generous SALESMEN'S PAY PLAN**.

Big **FREE BOOK** of  
**PRIZE FRUITS &  
Shrubs**—Send  
**COUPON**  
Below.

**Stark PRIZE FRUITS Book**

"I have never seen a Fruit Book so rich in Authentic Information!" declares a great horticulturist

**A. F. G. 6-36  
STARK  
NURSERIES  
Box 89  
Louisiana, Mo.**  
Without obligating me to buy, Send Me **FREE** copy of your New 1936 **PRIZE FRUIT Book**.

I may plant..... Trees, Shrubs and Roses. (number)

Name.....  
P. O. ....

St. or R. F. D. .... State.....  
Check in square at left—if you also want  
**FREE** details of our **NEW SALESMEN'S  
PAY PLAN** for either Spare or Full Time.

## NURSERY STOCK

A complete directory of fruit varieties is too extensive to be included here. A special Nursery and Fall Planting Guide will therefore be issued next October. It will contain a complete list of varieties, seeds and planting supplies.

## ORCHARD INSTRUMENTS

### Barometers

Bristol Co., Waterbury, Conn.  
Fleischhauer, Fr. & Son, Hollis, N.Y.  
Moeller Instrument Co., Inc., Brooklyn, N.Y.  
Precision Thermometer & Instrument Co., Philadelphia, Pa.  
Scientific Instrument Co., Detroit, Mich.  
Taylor Instrument Co., Rochester, N.Y.

### Hydrometers

A. Daigger & Co., Chicago, Ill.  
Eimer & Amend, New York, N.Y.  
Fleischhauer, Fr., & Son, Hollis, N.Y.  
H-B Instrument Co., Philadelphia, Pa.  
Moeller Instrument Co., Brooklyn, N.Y.  
Precision Thermometer & Instrument Co., Philadelphia, Pa.  
E. W. Schultheis, Brooklyn, N.Y.  
Taylor Instrument Co., Rochester, N.Y.  
E. B. Van Atta & Co., Inc., Olean, N.Y.

### Hygrometers

Bristol Co., Waterbury, Conn.  
Eimer & Amend, New York, N.Y.  
H-B Instrument Co., Philadelphia, Pa.  
Moeller Instrument Co., Inc., Brooklyn, N.Y.

Moore Dry Kiln Co., N. Portland, Ore.  
Parks-Cramer Co., Fitchburg, Mass.  
Precision Thermometer & Instrument Co., Philadelphia, Pa.  
Taylor Instrument Co., Rochester, N.Y.

### Microscopes

Eimer & Amend, New York, N.Y.  
Gaertner Scientific Corp., Chicago, Ill.

### Scales

Exact Weight Scale Co., Columbus, Ohio  
Fairbanks, Morse & Co., Chicago, Ill.  
Howe Scale Co., Rutland, Vt.  
Toledo Scale Co., Toledo, Ohio.

### Soil Testing Outfits

Edwards Laboratory, Lansing, Mich.  
Parker Machine Works, Riverside, Calif.  
Sudbury Soil Testing Laboratory, Sudbury, Mass.

### Testers, Fruit Pressure

D. Ballauf Mfg. Co., Washington, D.C.  
John Chattillon & Sons, New York, N.Y.  
Westinghouse Electric & Mfg. Co., E. Pittsburgh, Pa.

### Thermometers

Bristol Co., Waterbury, Conn.  
A. Daigger & Co., Chicago, Ill.  
Eimer & Amend, New York, N.Y.  
Fleischhauer, Fr., & Son, Hollis, N.Y.  
H-B Instrument Co., Philadelphia, Pa.  
Moeller Instrument Co., Inc., Brooklyn, N.Y.  
Moore Dry Kiln Co., N. Portland, Ore.  
Ohio Thermometer Co., Springfield, Ohio  
Palmer Co., Cincinnati, Ohio  
Philadelphia Thermometer Co., Philadelphia, Pa.  
Precision Thermometer & Instrument Co., Philadelphia, Pa.  
E. W. Schultheis Corp., Brooklyn, N.Y.  
Taylor Instrument Co., Rochester, N.Y.

### Thermostats

Bristol Co., Waterbury, Conn.  
H-B Instrument Co., Inc., Philadelphia, Pa.  
Moeller Instrument Co., Inc., Brooklyn, N.Y.  
Moore Dry Kiln Co., N. Portland, Ore.  
Powers Regulator Co., Chicago, Ill.  
Taylor Instrument Co., Rochester, N.Y.

### ON THE BOARDWALK

## The Flanders

Season **JUNE 20th** to **SEPTEMBER 30th**

### MODERN FIREPROOF

**232 rooms** with bath and ocean view **Open** and inclosed sun decks. **3 open air** circulating sea water pools. All outdoor sports.

### American Plan - Low Rates

**J. Howard Slocum  
Manager**



**OCEAN CITY, N.J.**



# PACKAGES AND PACKAGING

## Containers

### BAGS, CLOTH

Bemis Bro. Bag Co., St. Louis, Mo.  
Ceri Bros. Bag Co., St. Louis, Mo.  
Fulton Bag & Cotton Mills, Atlanta, Ga.  
Halstead Co., Jersey City, N.J.  
Premier Bag Co., Brooklyn, N.Y.

### BAGS, OPEN MESH

Bemis Bro. Bag Co., St. Louis, Mo.  
Chase Bag Co., Cleveland, Ohio  
H. Chesler Burlap Bag Co., Cleveland, O.  
Fulton Bag & Cotton Mills, Atlanta, Ga.

### BASKETS, CORRUGATED

Ashtabula Corrugated Box Co., Ashtabula, Ohio  
Fruit & Produce Packing, Inc., Indianapolis, Ind.

### BASKETS, FIBER

John Bacon, Inc., Gasport, N.Y.  
Bloomer Bros. Co., Newark, N.Y.  
Fruit & Produce Packing, Inc., Indianapolis, Ind.  
Robert Gair Co., Inc., New York, N.Y.  
National Vulcanized Fibre Co., Wilmington, Del.  
Pioneer Paper Stock Co., Chicago, Ill.  
Fred C. Strype, New York, N.Y.  
Edwin C. Tyson, Flora Dale, Pa.

## Fruit Growers' Supplies

**MANUFACTURER:** Baskets, Ladders, Picking Bags, Tree Bands, Grafting Materials, Tanks, Liners and Cushions.

**JOBBER:** Sprayers and Fittings, Bellows Dusters, Hose and Guns, Insecticides.

### JOHN BACON INC., GASPORT, N.Y.

### BASKETS, PAPER

Robert Gair Co., Inc., New York, N.Y.  
Owens-Illinois Pacific Coast Co., San Francisco, Calif.  
Pioneer Paper Stock Co., Chicago, Ill.  
Fred C. Strype, New York, N.Y.

### BOXES, BERRY

Wm. E. Asplin Basket Co., Cleveland, O.  
Berlin Fruit Box Co., Berlin Heights, O.  
Bloomer Bros. Co., Newark, N.Y.  
Frank L. Deaner & Son, Benton Harbor, Mich.  
H. A. Du Bois & Sons, Inc., Cobden, Ill.  
F. W. Harrison & Son, Painesville, Ohio  
New Albany Box & Basket Co., New Albany, Ind.  
Paducah Box & Basket Co., Paducah, Ky.  
Rollrim Box Co., Benton Harbor, Mich.  
Sutherland Paper Co., Kalamazoo, Mich.  
Wolverine Carton Co., Grand Rapids, Mich.

### BOXES, CORRUGATED

Ashtabula Corrugated Box Co., Ashtabula, Ohio  
Bird & Son, Inc., E. Walpole, Mass.  
Brunt & Co., Chicago, Ill.  
Fruit & Produce Packing, Inc., Indianapolis, Ind.  
Robert Gair Co., Inc., New York, N.Y.  
Hinde & Dauch Paper Co., Sandusky, O.  
Hummel & Downing Co., Milwaukee, Wis.  
Owens-Illinois Pacific Coast Co., San Francisco, Calif.  
Pioneer Paper Stock Co., Chicago, Ill.  
Simplex Paper Corp., Adrian, Mich.

### BOXES, FIBER

Bird & Son, Inc., E. Walpole, Mass.  
Bloomer Bros. Co., Newark, N.Y.  
Brunt & Co., Chicago, Ill.  
Fruit & Produce Packing, Inc., Indianapolis, Ind.  
Robert Gair Co., Inc., New York, N.Y.  
Hinde & Dauch Paper Co., Sandusky, O.

Hummel & Downing Co., Milwaukee, Wis.

National Vulcanized Fibre Co., Wilmington, Del.

Pioneer Paper Stock Co., Chicago, Ill.  
Rollrim Box Co., Benton Harbor, Mich.  
Fred C. Strype, New York, N.Y.  
Van Vick Paper Co., Duluth, Minn.  
Wabash Fibre Box Co., Terre Haute, Ind.

### BOXES, WINDOW

Robert Gair, Inc., Piermont, N.Y.  
Sutherland Paper Co., Kalamazoo, Mich.

### BOXES, WOOD

Acme Veneer Package Co., Inc., Orchard Park, N.Y.  
Barden & Robeson Corp., Penn Yan, N.Y.  
Chicago Mill & Lumber Co., Chicago, Ill.  
Cummer-Graham Co., Paris, Texas  
H. A. Du Bois & Sons, Inc., Cobden, Ill.  
Evansville Basket & Crate Co., Evansville, Ind.  
General Box Co., Chicago, Ill.  
Green Co., Bellows Falls, Vt.  
Marinette & Menominee Box Co., Marinette, Wis.  
Nants & Co., Gleason, Tenn.  
New Albany Box & Basket Co., New Albany, Ind.  
New England Box Co., New York, N.Y.  
Pierce-Williams Co., South Haven, Mich.  
Smeed Box Co., Cleveland, Ohio  
Edwin C. Tyson, Flora Dale, Pa.  
Walter Verhalen Co., Dallas, Texas  
Virginia Barrel Co., Winchester, Va.

### TUBS, WOOD

Acme Veneer Package Co., Inc., Orchard Park, N.Y.  
Burlington Basket Co., Burlington, Iowa  
Cummer-Graham Co., Paris, Texas  
Edgerton Mfg. Co., Plymouth, Ind.  
Evansville Basket & Crate Co., Evansville, Ind.  
Walter Verhalen Co., Dallas, Texas  
Virginia Barrel Co., Winchester, Va.

### Cushions

Acme Veneer Package Co., Inc., Orchard Park, N.Y.  
Charles M. Allen, Inc., Fulton, N.Y.  
John Bacon, Inc., Gasport, N.Y.  
Continental Paper Products Co., Denver, Colo.  
Fruit & Produce Packing, Inc., Indianapolis, Ind.  
B. F. Goodrich Co., Akron, Ohio  
Hinde & Dauch Paper Co., Sandusky, O.  
Rice, Trew & Rice Co., Inc., Biglerville, Pa.

Simplex Paper Corp., Adrian, Mich.  
Fred C. Strype, New York, N.Y.  
Sutherland Paper Co., Kalamazoo, Mich.

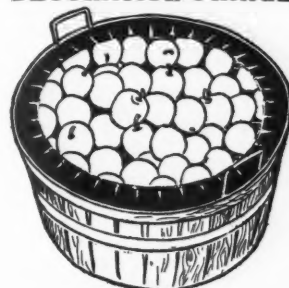
### Excelsior

Charles M. Allen, Inc., Fulton, N.Y.  
American Excelsior Corp., Chicago, Ill.  
Brooks Paper Co., St. Louis, Mo.  
Clark Stek-O Corp., Rochester, N.Y.  
Excelsior Mills Corp., Jacksonville, Fla.  
Excelsior Supply Co., Cleveland, Ohio  
Paper Supply Co., Los Angeles, Calif.  
Pioneer Paper Stock Co., Chicago, Ill.  
Sylvania Industrial Corp., New York, N.Y.  
E. W. Twitchell, Inc., Philadelphia, Pa.

### Fringes

Acme Veneer Packing Co., Inc., Orchard Park, N.Y.  
Continental Paper Products Co., Denver, Colo.  
Frank L. Deaner & Son, Benton Harbor, Mich.  
Fruit & Produce Packing, Inc., Indianapolis, Ind.  
Pioneer Paper Stock Co., Chicago, Ill.  
Rice, Trew & Rice Co., Inc., Biglerville, Pa.  
Sutherland Paper Co., Kalamazoo, Mich.  
Wolverine Carton Co., Grand Rapids, Mich.

## FRUIT PACKED WITH DECORATIVE FRINGE

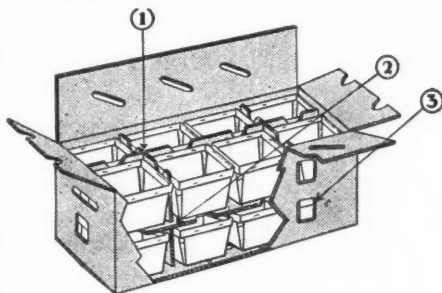


**COMMANDS BETTER PRICES**  
For samples and quotations

WRITE  
**WOLVERINE CARTON CO.**  
Grand Rapids, Mich.

## ASHTABULA BERRY CRATES

*Eliminate loss due to crushed berries!*



### NOTE THESE FEATURES

1. One inch clearance over top of baskets in each layer.
2. Separator pad between layers.
3. Ample ventilation. No spoiled fruit.

These modern and attractive containers deliver your berries to the consumer as fresh and whole as when they were packed insuring quicker sales at top prices.

Write us for information

**ASHTABULA CORRUGATED BOX CO.**  
ASHTABULA, OHIO

# PACKAGES AND PACKAGING

## Labels

Brandau-Craig-Dickerson Co., Nashville, Tenn.  
Colorprint Label Co., St. Louis, Mo.  
Epsen Lithographing Co., Omaha, Nebr.  
Gamse Lithographing Co., Inc., Baltimore, Md.  
A. Hoen & Co., Baltimore, Md.  
Lambooy Label & Wrapper Co., Kalamazoo, Mich.  
A. B. Morse Co., St. Joseph, Mich.  
Rainbow Litho. Co., Cincinnati, Ohio.  
Reynolds & Reynolds Co., Dayton, Ohio  
St. Louis Sticker Co., St. Louis, Mo.  
Schmidt Litho. Co., San Francisco, Calif.  
Unique Printed Products Co., Inc., Terre Haute, Ind.  
United States Printing & Lithograph Co., Cincinnati, Ohio  
Wheeling News Lithograph Co., Wheeling, W. Va.

*Fruit Package Labels* Printed in Full Color  
Made to Your Order  
Write for Samples and Prices  
**A. B. MORSE CO.**  
St. Joseph, Mich.

## Liners

Acme Veneer Package Co., Inc., Orchard Park, N.Y.  
Charles M. Allen, Inc., Fulton, N.Y.  
Arkell Safety Bag Co., New York, N.Y.  
John Bacon, Inc., Gasport, N.Y.  
Clark Stek-O Corp., Rochester, N.Y.  
Continental Paper Products Co., Denver, Colo.  
Frank L. Deaner & Son, Benton Harbor, Mich.  
Evansville Basket & Crate Co., Evansville, Ind.  
Fruit & Produce Packing, Inc., Indianapolis, Ind.  
Owens-Illinois Pacific Coast Co., San Francisco, Calif.  
Pioneer Paper Stock Co., Chicago, Ill.  
F. A. Read, Inc., Albion, N.Y.  
Rice, Trew & Rice Co., Biglerville, Pa.  
Simplex Paper Corp., Adrian, Mich.  
Fred C. Strype, New York, N.Y.  
Sutherland Paper Co., Kalamazoo, Mich.  
Edwin C. Tyson, Flora Dale, Pa.

**RTR FRUIT PACKING SUPPLIES**  
Basket Liners—Basket Cushions—Rubber Padded Facers—Fringes—Corrugated Caps—Packing Tubs—Shredded Oil Paper—Crate Guards  
The complete line of paper supplies for packing Fruits and Vegetables  
**RICE, TREW & RICE COMPANY**  
Manufacturers  
BIGLERVILLE, PENNA.

## Pads

John Bacon, Inc., Gasport, N.Y.  
Continental Paper Products Co., Denver, Colo.  
Frank L. Deaner & Son, Benton Harbor, Mich.  
Edwin C. Tyson, Flora Dale, Pa.

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## Paper, Shredded Oiled

John Bacon, Inc., Gasport, N.Y.  
Continental Paper Products Co., Denver, Colo.  
Diamond-T-Waxed Paper Corp., Chicago, Ill.  
Fruit & Produce Packing, Inc., Indianapolis, Ind.  
Rice, Trew & Rice Co., Inc., Biglerville, Pa.

## The Standard Paper Packaging Line

The Standard 66—Green Stripe Basket Caps  
The F&P Stripe Cushions  
Crystal Shredded Oiled Tissue—Fruit Wraps  
Corrugated Baskets and Boxes—Fringes  
Tree Bands—Box Liners—Other Specialties

**FRUIT & PRODUCE PACKING, INC.**  
700 W. Morris St. Indianapolis, Indiana

## Paper, Shredded Plain

Arkell Safety Bag Co., New York, N.Y.  
Brooks Paper Co., St. Louis, Mo.  
Clark Stek-O Corp., Rochester, N.Y.  
Fruit & Produce Packing, Inc., Indianapolis, Ind.  
Paterson Parchment Paper Co., Bristol, Pa.  
Pioneer Paper Stock Co., Chicago, Ill.  
Fred C. Strype, New York, N.Y.  
Winchester Cooperage Co., Winchester, Va.

## Stamping Inks

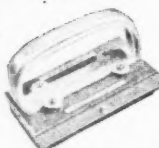
Marsh & Co., New York, N.Y.  
Rivet-O Mfg. Co., Orange, Mass.

## Stamps, Rubber

Acme Stamp Co., Cleveland, Ohio  
Jas. H. Matthews & Co., Pittsburgh, Pa.  
J. L. May Co., New York, N.Y.  
Merchants Stamp & Stencil Co., Inc., Chicago, Ill.  
Rivet-O Mfg. Co., Orange, Mass.

## SPEED UP YOUR MARKING WITH--

Special SPEED-MO logotype rubber stamps especially designed for marking fruit packages. This stamp is complete in one unit having interchangeable logotypes for size, grade and brand. With this new stamp it is not necessary to buy separate rubber stamps. The new SPEED-MO logotype rubber stamps will speed up your marking 200%.



Send for our descriptive folder

**RIVET-O MFG. COMPANY**  
36 Orchard St. Orange, Mass.

## Stencils and Brushes

Acme Stamp Co., Cleveland, Ohio  
Merchants Stamp & Stencil Co., Inc., Chicago, Ill.

## Wrappers, Metal Foil

Belmont Smelting & Refining Works, Inc., Brooklyn, N.Y.  
Reynolds Metals Co., Inc., New York, N.Y.  
Standard Rolling Mills, Inc., Brooklyn, N.Y.

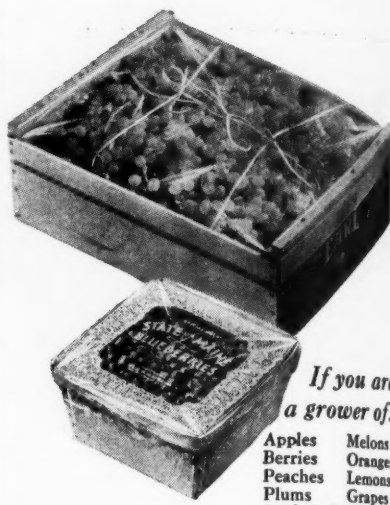
## SUNSET SHREDDED OILED PAPER SUNSET OILED APPLE AND PEAR WRAPS

Sunset Brand Oiled Copper Wraps and Fruit and Vegetable Wraps; liners and pads of all types.  
**Fred C. Strype, 103 LaFayette St., New York, N.Y.**

AMERICAN FRUIT GROWER

## HAVE YOU INVESTIGATED

the sales and profit possibilities in hoods and wraps of Cellophane?



If you are a grower of:

Apples Melons  
Berries Oranges  
Peaches Lemons  
Plums Grapes  
(and similar fruits)

...there is some interesting information for you in our files regarding the successful and economical use of Cellophane by many other growers.

Write today. Let us tell you how this modern protection and merchandising aid can be easily applied to your business. No obligation.

Dept. PD, Du Pont Cellophane Co., Inc., 350 Fifth Ave., New York, N.Y.

**Cellophane**  
TRADE MARK

"Cellophane" is the registered trade-mark of the Du Pont Cellophane Co., Inc.



## Wrappers, Oiled

California Fruit Wrapping Mills, Inc., Pomona, Calif.  
Fruit & Produce Packing, Inc., Indianapolis, Ind.  
Pioneer Paper Stock Co., Chicago, Ill.  
Fred C. Strype, New York, N.Y.  
Winchester Cooperage Co., Winchester, Va.

## Wrappers, Plain

California Fruit Wrapping Mills, Inc., Pomona, Calif.  
Fruit & Produce Packing, Inc., Indianapolis, Ind.  
Wolf River Paper & Fiber Co., Shawano, Wis.

## Wrappers, Transparent

Brooks Paper Co., St. Louis, Mo.  
Du Pont Cellophane Co., Inc., New York, N.Y.  
Eastman Kodak Co., Rochester, N.Y.  
Goodyear Tire & Rubber Co., Akron, O.  
Pioneer Paper Stock Co., Chicago, Ill.  
Fred C. Strype, New York, N.Y.  
Sylvania Industrial Corp., New York, N.Y.

## Wrappers, Vegetable Parchment

Kalamazoo Vegetable Parchment Co., Parchment, Mich.  
Paterson Parchment Paper Co., Bristol, Pa.

JUNE, 1936



# PACKING HOUSE EQUIPMENT

## Bagging Machines

Hampshire Implement Co., Hatfield, Mass.

## Belt Lacing

Armstrong-Bray & Co., Chicago, Ill.

## Belting

Cincinnati Rubber Mfg. Co., Cincinnati, Ohio

Continental Rubber Works, Erie, Pa.

Goodall Rubber Co., Philadelphia, Pa.

B. F. Goodrich Co., Akron, Ohio

Goodyear Tire & Rubber Co., Inc., Akron, Ohio

Parma Water Lifter Co., Parma, Idaho

Republic Rubber Co., Youngstown, Ohio

B. C. Tillinghast Rubber Co., Philadelphia, Pa.

U. S. Rubber Products, Inc., New York, N.Y.

## Boilers

Crane Co., Chicago, Ill.

A. B. Farquhar Co., Ltd., York, Pa.

Frick Co., Inc., Waynesboro, Pa.

## Box Making Machinery

Cobden Machine Works, Cobden, Ill.

Morgan Machine Co., Inc., Rochester, N.Y.

Parker Machine Works, Riverside, Calif.

Paxton Nailing Machine Co., Inc., Santa Ana, Calif.

## Box Nailing Machinery

Harmon Clark Co., Chicago, Ill.

William S. Doig, Inc., Brooklyn, N.Y.

Morgan Machine Co., Inc., Rochester, N.Y.

## Brushes

American Brush Co., Portland, Ore.

John Bean Mfg. Co., Lansing, Mich.

Braun Brush Co., Woodhaven, N.Y.

Fred A. Durand, Woodbury, Ga.

Trescott Co., Inc., Fairport, N.Y.

Wayland Machinery Co., Inc., Coveseville, Va.

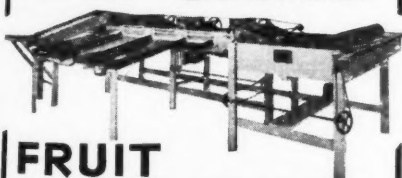
Wolfe Brush Co., Pittsburgh, Pa.

Wooster Brush Co., Wooster, Ohio



Wolfe Brush Company, Pennsylvania Avenue & Bidwell Street, N.S. Pittsburgh, Pa. Manufacturers of brushes for industrial use. Inquiries solicited for special styles for machine or hand use.

# REP Line



## FRUIT WASHER, GRADER and PACKING TABLE

- ALL IN ONE MACHINE -  
EASY TO OPERATE. STURDY CONSTRUCTION. ADJUSTABLE FOR SIZE AND TYPE. WRITE TODAY FOR ILLUSTRATED BULLETIN NO. 1B.

**PHILLIPS SPECIALTIES**  
HARTFORD, MICHIGAN

## Chains and Sprockets

Baldwin-Duckworth Chain Corp., Worcester, Mass.

Cyclone Fence Co., Waukegan, Ill.

Diamond Chain & Mfg. Co., Indianapolis, Ind.

H. D. Hudson Mfg. Co., Chicago, Ill.

Jeffrey Mfg. Co., Columbus, Ohio

Link-Belt Co., Chicago, Ill.

Locke Steel Chain Co., Bridgeport, Conn.

Parma Water Lifter Co., Parma, Idaho

Phillips Specialties, Hartford, Mich.

U. S. Chain & Forging Co., Pittsburgh, Pa.

## Cleaners and Polishers

George G. Bates, Kingston, N.Y.

John Bean Mfg. Co., Lansing, Mich.

Fred A. Durand, Woodbury, Ga.

J. D. Grabill, Woodstock, Va.

Niagara Sprayer & Chemical Co., Inc., Middleport, N.Y.

Phillips Specialties, Hartford, Mich.

Trescott Co., Inc., Fairport, N.Y.

Wayland Machinery Co., Inc., Coveseville, Va.

## Conveyors

John Bean Mfg. Co., Lansing, Mich.

Fred A. Durand, Woodbury, Ga.

A. B. Farquhar Co., Ltd., York, Pa.

Jeffrey Mfg. Co., Columbus, Ohio

Karl Kiefer Machine Co., Cincinnati, Ohio

Kirk & Blum Mfg. Co., Cincinnati, Ohio

Link-Belt Co., Chicago, Ill.

Logan Co., Inc., Louisville, Ky.

Mathews Conveyor Co., Ellwood City, Pa.

Niagara Sprayer & Chemical Co., Inc., Middleport, N.Y.

Parma Water Lifter Co., Parma, Idaho

Paxton Nailing Machine Co., Inc., Santa Ana, Calif.

Phillips Specialties, Hartford, Mich.

Standard Conveyor Co., N. St. Paul, Minn.

Trescott Co., Inc., Fairport, N.Y.

Wayland Machinery Co., Inc., Coveseville, Va.

## Dryers, Air

John T. Adt Co., Baltimore, Md.

John Bean Mfg. Co., Lansing, Mich.

Buffalo Foundry & Machine Co., Buffalo, N.Y.

J. P. Devine Mfg. Co., Mt. Vernon, Ill.

Moore Dry Kiln Co., N. Portland, Ore.

Phillips Specialties, Hartford, Mich.

## Ethylene

Carbide & Carbon Chemicals Corp., New York, N.Y.

Ohio Chemical & Mfg. Co., Cleveland, Ohio

## Ethylene Ripening Outfits

Carbide & Carbon Chemicals Corp., New York, N.Y.

Ohio Chemical & Mfg. Co., Cleveland, Ohio

## Excelsior Shredders

Mitts & Merrill, Saginaw, Mich.

## Facers, Barrel

Fruit & Produce Packing, Inc., Indianapolis, Ind.

B. F. Goodrich Co., Akron, Ohio

Hauber Cooperage Co., Kansas City, Kans.

A. H. Phillips Mfg. Co., Hulberton, N.Y.

Winchester Cooperage Co., Winchester, Va.

## Facers, Basket

Acme Veneer Package Co., Inc., Orchard Park, N.Y.

Continental Paper Products Co., Denver, Colo.

Fruit & Produce Packing, Inc., Indianapolis, Ind.

B. F. Goodrich Co., Akron, Ohio  
Hall Mfg. Co., Cedar Rapids, Iowa

AMERICAN FRUIT GROWER

Hauber Cooperage Co., Kansas City, Kans.

A. H. Phillips Mfg. Co., Hulberton, N.Y.

Rice, Trew & Rice Co., Inc., Biglerville, Pa.

Simplex Paper Corp., Adrian, Mich.

Winchester Cooperage Co., Winchester, Va.

## Fire Extinguishers

W. D. Allen Mfg. Co., Chicago, Ill.

American-La France & Foamite Corp., Elmira, N.Y.

Fyr-Fyter Co., Dayton, Ohio

General Fire Truck Corp., St. Louis, Mo.

National Formetal Co., Cleveland, Ohio

Pyrene Mfg. Co., Newark, N.J.

Safety Fire Extinguisher Co., New York, N.Y.

Wil-X-Mfg. Corp., Brooklyn, N.Y.

## Fly Papers

Excelsior Fly Paper Mills, Chicago, Ill.

Tanglefoot Co., Grand Rapids, Mich.

## Fly Ribbons

Tanglefoot Co., Grand Rapids, Mich.

## Fly Sprays

Excelsior Fly Paper Mills, Chicago, Ill.

Gulf Oil Corp. of Pa., Pittsburgh, Pa.

Lanair Co., Inc., Chicago, Ill.

Los Angeles Chemical Co., Los Angeles, Calif.

Sinclair Refining Co., New York, N.Y.

Stanco, Inc., New York, N.Y.

Standard Oil Co. of Ohio, Cleveland, Ohio

Tanglefoot Co., Grand Rapids, Mich.

## Forms, Packing

Acme Veneer Package Co., Inc., Orchard Park, N.Y.

Clark Stek-O Corp., Rochester, N.Y.

Continental Paper Products Co., Denver, Colo.

Frank L. Deaner & Son, Benton Harbor, Mich.

Fruit & Produce Packing, Inc., Indianapolis, Ind.

Winchester Cooperage Co., Winchester, Va.

# DON'T WAIT FOR NATURE . . . . .

*Ripen with Ethylene Gas*



Ethylene ripens bananas, citrus fruits, pears, and tomatoes a few weeks ahead of Nature. Firmer fruit and better color is assured.

Write for University of Minnesota Bulletin 247, "Artificial Ripening of Fruits and Vegetables." We will supply same with prices on equipment.

Write to:

**The Ohio Chemical & Mfg. Co.**

1177 Marquette Street - Cleveland, Ohio

# WAYLAND

THE WORLD'S FINEST PACKING  
MACHINERY FOR APPLES AND  
TOMATOES

*Dependable  
Accurate  
Fast*

*Free from bruise  
Silent running  
Exceptionally fine steel construction*

For Packing  
Barrels, Boxes, Bushels and Cartons

*A size for every user*

**Wayland Machinery Co., Inc.**  
Covesville, Virginia

## Apple, Peach, Fruit Graders

that are dependable, at low cost.  
Priced \$100.00 and up.

For particulars write

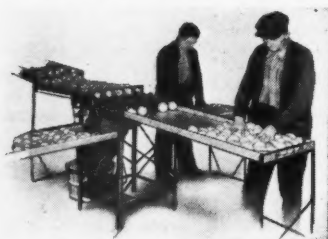
**PARMA WATER LIFTER CO.,**  
Parma, Idaho, U. S. A.

## KOKOMO NAIL & BRAD CO.

KOKOMO, INDIANA

Manufacturers of Cement Coated and  
Common Nails for over thirty-five  
years. Can make shipment of all sizes  
in any quantity.

## A GOOD Fruit Grader



for as Low as **\$90**

Read what growers say about it—  
"No damage to fruit, and we have a  
reputation for careful handling."

"As high as 70 bushels per hour graded  
with our electric Butler."

"No mechanical trouble—we want to  
compliment you on the ease of operation."

Names of many growers using Butler  
Graders, and their full reports, are in our  
new 1936 bulletin. Write for it now.

The Butler Grader "Handles the Fruit  
with Rubber Gloves"—it has soft rubber  
cups and sizing rings. Changeable rings, to  
divide fruit into any four sizes you want.

Shipped complete, ready to start work—  
nothing to build. Hand model \$90; Elec-  
tric \$115; Gasoline \$140.

## BUTLER "SIMPLEX" GRADER

BUTLER MANUFACTURING CO., CONNEAUT, OHIO

MAIL COUPON

BUTLER MANUFACTURING CO., Conneaut, Ohio.

Send your bulletin describing the Butler Grader,  
with reports from growers using it.

Name .....

Address .....

.....

.....

.....

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# PACKING HOUSE EQUIPMENT

## Graders and Sizers

George G. Bates, Kingston, N.Y.  
John Bean Mfg. Co., Lansing, Mich.  
Butler Mfg. Co., Conneaut, Ohio  
Cutler Mfg. Co., Portland, Ore.  
Fred A. Durand, Woodbury, Ga.  
J. D. Grabill, Woodstock, Va.  
F. J. Heacock, Clearville, Pa.  
Ideal Grader & Nursery Co., Hood River,  
Ore.  
Niagara Sprayer & Chemical Co., Inc.,  
Middleport, N.Y.  
Parma Water Lifter Co., Parma, Idaho  
Paxton Nailing Machine Co., Santa Ana,  
Calif.  
F. B. Pease Co., Rochester, N.Y.  
Phillips Specialties, Hartford, Mich.  
Taylor's Grader, Anna, Ill.  
Trescott Co., Inc., Fairport, N.Y.  
Edwin C. Tyson, Flora Dale, Pa.  
Wayland Machinery Co., Inc., Covesville,  
Va.

## Insect Electrocuters

(See "Insect and Disease Control, Or-  
chard Sanitation, Insect Electrocuters")

## Lidding Machines

John Bean Mfg. Co., Lansing, Mich.  
Continental Paper Products Co., Denver,  
Colo.  
Cutler Mfg. Co., Portland, Ore.  
William S. Doig, Inc., Brooklyn, N. Y.  
Parker Machine Works, Riverside, Calif.  
Paxton Nailing Machine Co., Santa Ana,  
Calif.

## Nails

Atlas Tack Corp., Fairhaven, Mass.  
Kokomo Nail & Brad Co., Kokomo, Ind.

## MENTION

# AMERICAN FRUIT GROWER

WHEN YOU

WRITE!

## Packing Tables

Niagara Sprayer & Chemical Co., Inc.,  
Middleport, N.Y.  
Parma Water Lifter Co., Parma, Idaho  
Phillips Specialties, Hartford, Mich.

## Rings, Sizing

F. A. Read, Inc., Albion, N. Y.  
Edwin C. Tyson, Flora Dale, Pa.

## Ripening Outfits, Ethylene

Carbide & Carbon Chemicals Corp., New  
York, N.Y.  
Ohio Chemical & Mfg. Co., Cleveland, O.

## Sorting Tables, Fruit

John Bean Mfg. Co., Lansing, Mich.  
Cutler Mfg. Co., Portland, Ore.  
Fred A. Durand, Woodbury, Ga.  
Ideal Grader & Nursery Co., Hood River,  
Ore.  
Niagara Sprayer & Chemical Co., Inc.,  
Middleport, N.Y.  
Parma Water Lifter Co., Parma, Idaho  
Phillips Specialties, Hartford, Mich.  
Wayland Machinery Co., Inc., Covesville,  
Va.

## Staplers and Stitchers

Cobden Machine Works, Cobden, Ill.  
William S. Doig, Inc., Brooklyn, N.Y.  
Fruit & Produce Packing, Inc., Indian-  
apolis, Ind.  
General Food Package Equipment Corp.,  
Benton Harbor, Mich.  
Heller Co., Cleveland, Ohio  
Markwell Mfg. Co., Inc., New York, N.Y.  
St. Joseph Iron Works, St. Joseph, Mich.  
Saranac Machine Co., Benton Harbor,  
Mich.

## Staples

Fruit & Produce Packing, Inc., Indian-  
apolis, Ind.  
Markwell Mfg. Co., Inc., New York, N. Y.

## EVERYTHING FOR THE ORCHARD

Wholesale and Retail

## FRUIT PACKING EQUIPMENT AND SUPPLIES

Conveyors, Graders, Washers, Dryers, Polishers, Wash-  
ing Chemicals, Caps, Liners, Cushions, Wraps, Shred-  
ded Oil Paper, Basket Turners, Jiffy Ladders, Barrel  
Presses, Nails, Hatchets, Stencils, Stamps, Int.  
Brushes, Nail Strippers, Sizing Rings, Labels, and  
Paste, Cider Presses and Containers, Apple Butter  
Cookers.

**EDWIN C. TYSON, Flora Dale, Pa., U. S. A.**

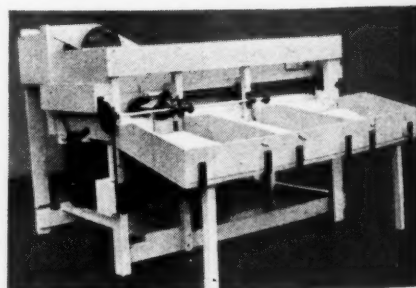
See Advs. Pages 28, 40, 41

## Washers, Fruit

John Bean Mfg. Co., Lansing, Mich.  
Cutler Mfg. Co., Portland, Ore.  
Fairbanks, Morse & Co., Chicago, Ill.  
Ideal Grader & Nursery Co., Hood River,  
Ore.  
Parma Water Lifter Co., Parma, Idaho  
Paxton Nailing Machine Co., Santa Ana,  
Calif.  
Phillips Specialties, Hartford, Mich.  
Edwin C. Tyson, Flora Dale, Pa.  
Wayland Machinery Co., Inc., Covesville,  
Va.

## Washing Compounds, Fruit

American Colloid Co., Chicago, Ill.  
American Cyanamid & Chemical Corp.,  
Insecticide Dept., New York, N.Y.  
General Chemical Co., New York, N.Y.  
Grasselli Chemical Co., Inc., Cleveland,  
Ohio  
Mallinckrodt Chemical Works, St. Louis,  
Mo.  
Mechling Bros. Chemical Co., Camden,  
N.J.  
Monsanto Chemical Co., Rubber Service  
Laboratories Div., Akron, Ohio  
National Oil Products Co., Harrison, N.J.  
Philadelphia Quartz Co., Philadelphia,  
Pa.  
Tennessee Eastman Corp., Kingsport,  
Tenn.



A self-contained grading, brushing and  
sizing unit complete with gasoline or elec-  
tric motor and bins. Easily moved. Capa-  
city 600 bushels in 10 hours. Small grow-  
er can put up standard pack and compete  
with large packing houses.

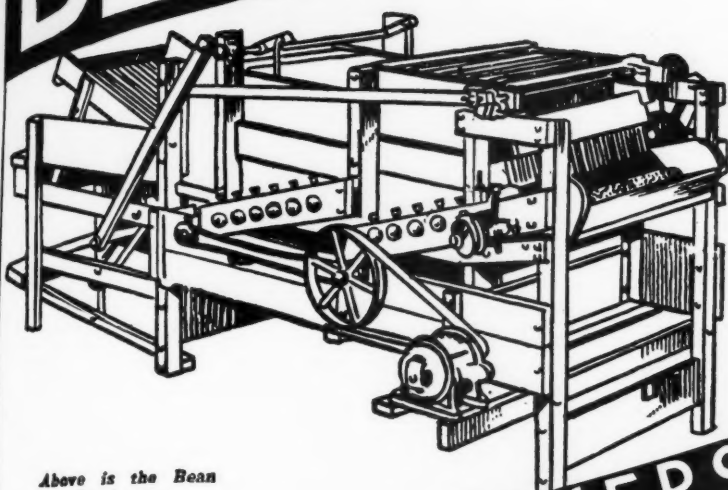
Sells for \$205 to \$350 Write for bulletin  
**Fred A. Durand Woodbury, Ga.**

JUNE, 1936

AMERICAN FRUIT GROWER



# BEAN-



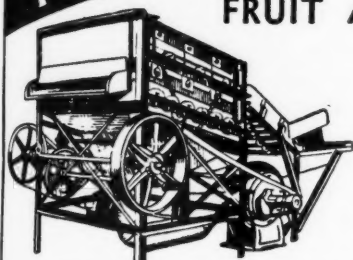
Above is the Bean  
Brush Type  
Washer.

## BEAN FRUIT WASHERS

Fruit washing is not expensive and it gives you bright clean fruit and enables you to comply with tolerance restrictions. Smart growers are spraying diligently to protect their fruit and washing to protect their sales. Bean has a large assortment of washers and any need can be met. Flotation or brush types for either growers or packing houses.

Ask for complete washer literature and explain your needs.

## FRUIT WASHERS - CLEANERS

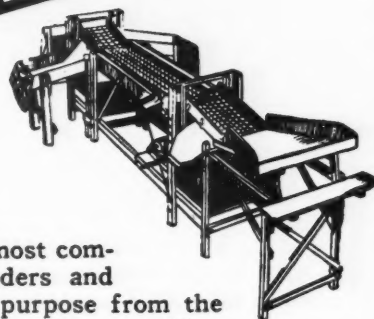


### BEAN FRUIT AND POTATO CLEANERS

Various kinds of fruit and vegetables can be cleaned to good advantage especially if the cleaner is efficient. The

patented combination of brushes and cloth wipers on the Bean Cleaner offers unusually good cleaning. These 2-Way Cleaners are built in three sizes. For peaches or potatoes it can be furnished with a suction fan for carrying away the dirt, fuzz and dust. Ask for special information on these money making cleaners.

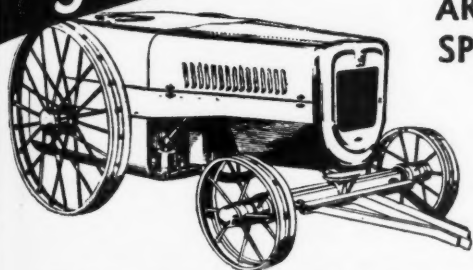
### GRADERS AND SIZERS



BEAN has the most complete line of graders and sorters for every purpose from the small home model to large packing house models. These are of varied sizes and are built in sections so that any special requirements can be met. It is a decided advantage to explain your problems in detail and allow us to submit plans and recommendations without obligation to you.

## SPRAYERS -- GRADERS

### BEAN ROYAL ARMORED SPRAYERS



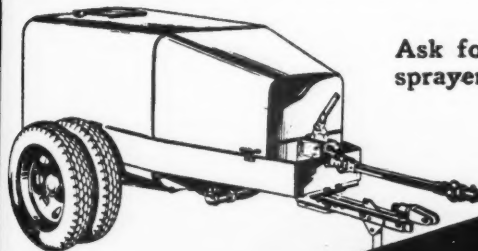
This all steel armored sprayer is unquestionably the most satisfactory and economical sprayer built today.

It is built in several sizes and can be equipped with pneumatic tires if desired or without wheels for mounting on motor trucks. Ask for special sprayer literature.

### ROYAL ARMORED TRACTOR SPRAYERS

This model is designed for tractor use and is shown with pneumatic tires but steel wheels can be furnished.

This model is built in several sizes for various requirements or to fit different tractors.



Ask for special  
sprayer catalog.

**JOHN BEAN MFG. CO.** Lansing, Mich. - San Jose, Calif.

JOHN BEAN MFG. CO., 15 Hosmer St., Lansing, Mich.  
West of Rockies write to 115 W. Julian St., San Jose, Cal.

Gentlemen: I am interested in

Name \_\_\_\_\_ Town \_\_\_\_\_ R. F. D. or Street \_\_\_\_\_ State \_\_\_\_\_

## PICKING

### Aprons

Fulton Bag & Cotton Mills, Atlanta, Ga.  
Miller Rubber Co., Akron, Ohio  
Republic Rubber Co., Youngstown, Ohio  
Seattle Tent & Awning Co., Seattle, Wash.  
Winchester Cooperage Co., Winchester, Va.

### PICK FRUIT THE EASY WAY

#### USE CYCLONE PICKING BAGS

Has wide open mouth. Empties from the bottom. Made of heavy grade "A" duck with 2 adjustable shoulder straps and hip strap. Write for our descriptive circular and prices.



THE CYCLONE SEEDER CO.—URBANA, IND.

### Bags

Arkell Safety Bag Co., New York, N.Y.  
John Bacon, Inc., Gasport, N.Y.  
John Bean Mfg. Co., Lansing, Mich.  
Cerr Bros. Bag Co., St. Louis, Mo.  
Cyclone Seeder Co., Urbana, Ind.  
Fulton Bag & Cotton Mills, Atlanta, Ga.  
Hardie Mfg. Co., Portland, Ore.  
Hauber Cooperage Co., Kansas City, Kans.  
Philadelphia Blanket Co., Inc., Philadelphia, Pa.

### TWO FAMOUS APPLE

## PICKING BAGS

"The Pennsylvania"

"The So Easy"

PHILADELPHIA BLANKET CO.

2nd and Allegheny Ave., Philadelphia, Pa.

Scheffer & Rossum Co., St. Paul, Minn.  
Seattle Tent & Awning Co., Seattle, Wash.  
M. D. Smith Tent & Awning Co., Atlanta, Ga.  
Taylor's Grader, Anna, Ill.  
Edwin C. Tyson, Florida Dale, Pa.  
Wells & Wade, Wenatchee, Wash.  
Winchester Cooperage Co., Winchester, Va.

### Fruit Picker's Bag

Less Bruised Fruit—More Efficiency! Regular stock models, or special designs for any need. High quality. Send \$1.00 for trial apple or peach bag. \$2.00 for Citrus. Money back if bag is returned. Order now! New model.

M. D. SMITH

TENT & AWNING COMPANY

136 Marietta St. Atlanta, Ga.

### Baskets

Acme Veneer Package Co., Inc., Orchard Park, N.Y.  
John Bacon, Inc., Gasport, N.Y.  
Council Bluffs Basket Co., Council Bluffs, Iowa  
Frank L. Deaner & Son, Benton Harbor, Mich.  
Edgerton Mfg. Co., Plymouth, Ind.  
Fruit Growers Package Co., Paw Paw, Mich.  
Leigh Banana Case Co., Chicago, Ill.  
Pierce-Williams Co., South Haven, Mich.

### Clippers, Fruit

Bartlett Mfg. Co., Detroit, Mich.  
Claus Shear Co., Fremont, Ohio  
Henry Disston & Sons, Inc., Philadelphia, Pa.  
W. S. Hart, New Smyrna, Fla.  
Harvey Machine Co., Los Angeles, Calif.  
J. Wiss & Sons Co., Newark, N.J.

PAGE 40

### Crates, Field

Berlin Fruit Box Co., Berlin Heights, Ohio  
Frank L. Deaner & Son, Benton Harbor, Mich.  
General Box Co., Chicago, Ill.  
Green Co., Bellows Falls, Vt.  
Marietta Fruit Package & Lumber Co., Marietta, Ohio  
Marinette & Menominee Box Co., Marinette, Wis.  
New England Box Co., New York, N.Y.  
Paducah Box & Basket Co., Paducah, Ky.  
Smeed Box Co., Cleveland, Ohio  
Edwin C. Tyson, Florida Dale, Pa.

## FIELD CRATES

Sturdily constructed with hardwood cleats.

Write for prices

THE SMEED BOX COMPANY

1878 Scranton Road Cleveland, Ohio

### Ladders

John Bacon, Inc., Gasport, N.Y.  
Bauer Mfg. Co., Wooster, Ohio  
Goshen Churn & Ladder Co., Goshen, Ind.  
Heider Mfg. Co., Carroll, Iowa  
Howard Mfg. Co., Kent, Wash.  
Ideal Grader & Nursery Co., Hood River, Ore.  
Inland Mfg. Co., Oakland, Calif.  
Los Angeles Ladder Co., Los Angeles, Calif.  
Michigan Ladder Co., Ypsilanti, Mich.  
Fre Patton, Jewett, Ohio  
F. B. Pease Co., Rochester, N.Y.  
Phillips Specialties, Hartford, Mich.  
Rich Pump & Ladder Co., Cincinnati, O.  
Safety Ladder Co., E. Hartford, Conn.  
John S. Tilley Ladder Co., Inc., Watervliet, N.Y.  
Winchester Cooperage Co., Winchester, Va.  
Zoss Ladder Works, Portland, Ore.

## LADDERS—for Fruit Picking

### DIRECT FROM FACTORY TO YOU

BAUER Ladders for every purpose are famous for quality. Special designs for fruit pickers have important construction features, such as Countersunk Rungs and Double-Dipped Tensons, making them stronger and last longer. Write for prices and complete information.

BAUER MFG. CO., Wooster, Ohio

## EVERYTHING FOR THE ORCHARD

Wholesale and Retail

### Growing and Harvesting Equipment and Supplies

Riding Spring Tooth and Disc Harrows, Ladders, Ladder Trucks, Picking Bags, Baskets and Buckets, Orchard and Shipping Crates, Wire Pickers, Pickers' Tickets, Barrels, Baskets, Display Containers, etc.

EDWIN C. TYSON, Florida Dale, Pa., U.S.A.

See Advs. Pages 28, 38, 41

### Pickers, Fruit

F. D. Kees Mfg. Co., Beatrice, Nebr.

### Stands

Berlin Fruit Box Co., Berlin Heights, O.

### Straps

John Bacon, Inc., Gasport, N.Y.

### Towers, Fruit Picking

Karth Spray Equipment Co., Los Angeles, Calif.

AMERICAN FRUIT GROWER

**AGLORIOUS WEEK**  
CRUISING THE  
GREAT LAKES  
on the S-S.

**SEE AND BEE**

**7 DAYS..\$49<sup>50</sup>**  
ALL EXPENSE **49<sup>50</sup>** AND UP

**Weekly Sailings from Cleveland, Buffalo and Chicago throughout July and August**

**BUFFALO and CLEVELAND to MACKINAC ISLAND SAULT STE. MARIE Into GREEN BAY, FRANKFORT, MICH., GEORGIAN BAY and CHICAGO**

**Stop-overs and Low One Way Rates**

The largest, finest ship in Great Lakes Cruise service—the smartest and most elaborate program of sports, of entertainment with all-star revues and dancing in spacious ball room. Over 2000 miles of scenic delight.

Beautiful illustrated folder with complete information, and ship plans free on request.

See Your Local Travel Agent

**THE CLEVELAND AND BUFFALO TRANSIT CO.**

East 9th Street Pier  
MAIn 8240 CLEVELAND



## POLLINATION

### Bee Supplies

Dadant & Sons, Hamilton, Ill.  
Highland Apiaries, West Elkton, Ohio  
G. B. Lewis Co., Watertown, Wis.  
A. I. Root Co., Medina, Ohio  
Stover Apiaries, Mayhew, Miss.  
A. G. Woodman Co., Grand Rapids, Mich.

### Package Bees and Queens

Brower Bee Co., Bangor, Ala.  
Central Louisiana Apiaries, Marksville, La.  
Citronelle Bee Co., Inc., Citronelle, Ala.  
H. E. Coffey, Whitsett, Texas  
Cotton Belt Apiaries, Paris, Texas  
Dadant & Sons, Hamilton, Ill.  
D. B. Eells, Houma, La.  
W. O. Gibbs Co., Brookfield, Ga.  
Highland Apiaries, West Elkton, Ohio  
D. C. Jackson, Funston, Ga.  
G. B. Lewis Co., Watertown, Wis.  
Miller Bros., Whitsett, Texas  
Rapides Apiaries, Winnfield, La.  
A. I. Root Co., Medina, Ohio  
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JUNE, 1938



# PRUNING AND GRAFTING

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John Bacon, Inc., Gasport, N.Y.  
Bartlett Mfg. Co., Detroit, Mich.  
Flintkote Co., New York, N.Y.  
M. H. Hunt & Son, Lansing, Mich.  
Interstate Chemical Mfg. Co., Jersey City, N.J.  
Edwin C. Tyson, Flora Dale, Pa.  
Andrew Wilson, Inc., Springfield, N.J.

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Walter E. Clark & Son, Milford, Conn.  
Henry Disston & Sons, Inc., Philadelphia, Pa.  
Alfred Field & Co., Inc., New York, N.Y.  
Remington Arms Co., Inc., Bridgeport, Conn.  
Carroll R. Tiffany, Conklin, N.Y.  
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## Melting Pots

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*The perfect all purpose pruner*  
**THE HKD PORTER POINTCUT**

Cuts suckers on the point with small handle opening. Cuts 1 1/4-inch limbs in throat of blades, with full handle opening. Designed especially for fruit, nursery and horticultural use—where closer, cleaner pruning is desirable. Both blades have sharp cutting edges which prevent bruising the bark and permit the blades to be placed closer against the main branch and the best place for pruning. Spur on upper blade supports lower blade and resists the tendency to cross the edges. Patented slide shift gives a 50% to 100% increase in cutting power. Light, handy in size, strong construction. Sells for \$4.50. Also available with 24" handles at \$4.60 and 27" at \$4.75.

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**EDWIN C. TYSON, Flora Dale, Pa., U.S.A.**  
See Advs. Pages 28, 38, 40



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American Blower Co., Detroit, Mich.  
Century Electric Co., St. Louis, Mo.  
Clarage Fan Co., Kalamazoo, Mich.  
Craine, Inc., Norwich, N.Y.  
Ilg Electric Ventilating Co., Chicago, Ill.  
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Kirk & Blum Mfg. Co., Cincinnati, Ohio  
Koppus Mfg. Co., Worcester, Mass.  
Moore Dry Kiln Co., Portland, Ore.  
Phillips Specialties Co., Hartford, Mich.  
United Motors Service, Inc., Detroit, Mich.  
L. J. Wing Mfg. Co., New York, N.Y.

### Closers, Cooling Room

Chicago Spring Hinge Co., Chicago, Ill.

### Doors

Baker Ice Machine Co., Inc., Omaha, Nebr.  
Craine, Inc., Norwich, N.Y.  
Parker Ice Machine Co., Inc., San Bernardino, Calif.  
Phoenix Ice Machine Co., Cleveland, O.  
York Ice Machinery Corp., York, Pa.

### Hinges

Chicago Spring Hinge Co., Chicago, Ill.  
Cincinnati Refrigerator Hardware Co., Cincinnati, Ohio

### Insulation

Armstrong Cork Products Co., Lancaster, Pa.  
Bird & Son, E. Walpole, Mass.  
The Celotex Corp., Chicago, Ill.  
Craine, Inc., Norwich, N.Y.  
Excelsior Mills Corp., Jacksonville, Fla.  
Gay Engineering Corp., Los Angeles, Calif.  
Insulite Co., Minneapolis, Minn.  
Johns-Manville, New York, N.Y.  
Masonite Corp., Chicago, Ill.  
Owens-Illinois Glass Co., Toledo, Ohio  
Pacific Lumber Co. of Illinois, Chicago, Ill.  
Red Head Brand Co., Chicago, Ill.  
Reynolds Metals Co., New York, N.Y.  
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National Lightning Protection Co., St. Louis, Mo.  
West Dodd Lightning Corp., Goshen, Ind.

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Cincinnati Refrigerator Hardware Co., Cincinnati, Ohio  
National Lock Co., Rockford, Ill.

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Atlas Tack Corp., Fairhaven, Mass.  
Kokomo Nail & Brad Co., Kokomo, Ind.

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Link-Belt Co., Chicago, Ill.

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Red Head Brand Co., Chicago, Ill.

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E. & F. King & Co., Inc., Boston, Mass.  
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Pure Carbonic, Inc., New York, N.Y.

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Bedell Engineering Co., Los Angeles, Calif.  
Burge Ice Machine Co., Chicago, Ill.  
Frick Co., Waynesboro, Pa.  
Gay Engineering Corp., Los Angeles, Calif.  
General Refrigeration Sales Co., Beloit, Wis.  
Hill Diesel Engine Co., Lansing, Mich.  
Parker Ice Machine Co., Inc., San Bernardino, Calif.  
Phoenix Ice Machine Co., Cleveland, Ohio  
Vilter Mfg. Co., Milwaukee, Wis.  
York Ice Machinery Corp., York, Pa.

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Brown Fence & Wire Co., Cleveland, Ohio  
A. M. Byers Co., Pittsburgh, Pa.  
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Flintkote Co., New York, N.Y.  
Gay Engineering Corp., Los Angeles, Calif.  
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Johns-Manville, New York, N.Y.  
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Kalamazoo Tank & Silo Co., Kalamazoo, Mich.

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 Bucher & Gibbs Plow Co., Philadelphia, Pa.  
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 Centaur Tractor Corp., Greenwich, Ohio  
 Champion Corp., Hammond, Ind.  
 Cleveland Tractor Co., Cleveland, Ohio  
 John Deere, Moline, Ill.  
 Dempster Mill Mfg. Co., Beatrice, Nebr.  
 Donald & Boerner Corp., Milwaukee, Wis.  
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 Dunham Co., Berea, Ohio  
 Dyrr Mfg. Co., Huntington Park, Calif.  
 Farm Machinery Mfg. Co., Marshalltown, Iowa  
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 Hussey Plow Co., N. Berwick, Maine  
 International Harvester Co., Chicago, Ill.  
 Killefer Mfg. Corp., Ltd., Los Angeles, Calif.  
 Jos. J. Kovar Co., Owatonna, Minn.  
 Lehr Co., Fremont, Ohio  
 Massey-Harris Co., Racine, Wis.  
 McAdam & Sons, Barker, N.Y.  
 Minneapolis-Moline Power Implement Co., Minneapolis, Minn.  
 Nash-Acme Harrow Co., Haddonfield, N.J.  
 Ohio Cultivator Co., Bellevue, Ohio  
 Oliver Farm Equipment Sales Co., Chicago, Ill.  
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 Townner Mfg. Co., Santa Ana, Calif.  
 Wiard Plow Co., Batavia, N.Y.

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 International Harvester Co., Chicago, Ill.  
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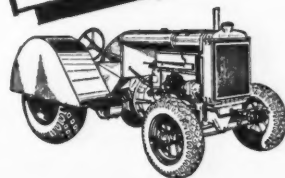
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 Farm Tools, Inc., Mansfield, Ohio  
 Gravely Motor Plow & Cultivator Co., Dunbar, W. Va.  
 International Harvester Co., Chicago, Ill.  
 Massey-Harris Co., Racine, Wis.  
 Minneapolis-Moline Power Implement Co., Minneapolis, Minn.  
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Cultivates  
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Case orchard and vineyard tractors handle easily, steer fast, pull full loads on short turns, get close under trees, don't tear limbs or bruise fruit. Case tractors weigh less, raise less dust, loosen rather than pack the soil. Don't postpone profits of modern power; cash in with Case! See your Case dealer... send coupon today.

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New Beeman Tractor Co., Minneapolis, Minn.  
Phillips Specialties, Hartford, Mich.  
Pioneer Mfg. Co., West Allis, Wis.  
Shaw Mfg. Co., Galesburg, Kans.  
Standard Engine Co., Minneapolis, Minn.  
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Centaur Tractor Corp., Greenwich, Ohio  
John Deere, Moline, Ill.  
Fate-Root-Heath Co., Plymouth, Ohio  
Huber Mfg. Co., Marion, Ohio  
International Harvester Co., Chicago, Ill.  
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ROLLER BEARINGS  
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## C L E T R A C

ANYWHERE



● Three facts about Cletrac make it best for orchard work of any kind, anywhere, at any time.

It is a crawler tractor, it has (exclusively) controlled differential steering, and it has a ground pressure of less than 6 pounds per square inch of track.

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EVERYTHING about the rugged GMC light delivery truck speaks "bigness." First of all, it's amply long for bigger-than-average bodies—big enough to accommodate a panel body with a loading space 7 feet 5 inches long or a pick-up body 7 feet 2 inches in length. The advantages of this substantially greater loading space are self-evident—you can haul more each trip or you can haul loads that would ordinarily require a larger, less economical truck.

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**THE TRUCK OF VALUE**

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# SUCCESSFUL ORCHARDS

● A "ROUND TABLE" PAGE FOR EVERY GROWER ●

## FERTILIZERS BUILD STRAWBERRY YIELDS

"FOR many years the strawberry growers in this section have not worried a great deal about fertilizers. New land was plentiful and it was cleared each year for strawberry planting. New land is now getting scarce in this part of the country and the strawberry grower must resort to planting on old land low in productivity," according to Charles Carmichael, secretary of the Ozark Fruit Growers' Association, Joplin, Mo. He continues: "Because the strawberry is a comparatively shallow-rooted plant, it requires a plentiful and immediate supply of plant food. Barnyard manure was at one time used, but this practice has been discouraged due to the introduction of weed seeds with the manure and to the expense. We now find the best practice is to plant cowpeas or soybeans the year previous to planting the strawberries. The leguminous cover crop is plowed under in the fall. The land is fertilized the following spring, about 10 days before planting, with 400 to 600 pounds of a 4-12-4 fertilizer, applied in a strip. In this section 400 pounds of superphosphate and 250 pounds of some nitrogen fertilizer are used. On some beds with poor soil, that have fruited, the same amounts of superphosphate and nitrogen are applied after harvest. Potash is sometimes beneficial on sandy soils."

## CENTURY-OLD PEAR STILL PRODUCING

MISS NELLIE NEVIUS of Jerseyville, Ill., writes, "A pear tree that was planted in 1830 and is said to have produced fruit every year since it came into bearing bloomed again this year. It is not as full of blossoms as it was last year, but I believe there were enough to produce a crop. The tree was planted by Ralph Hagaman Van Pelt, a pioneer, who came to Jersey County in the spring of 1830 from New Jersey. The trip was made in a covered wagon and among the articles that the family brought along was a bundle of fruit trees. Of the orchard that Van Pelt set out, the old pear tree alone remains."

## SCREW EYES AID IN BRACING TREES

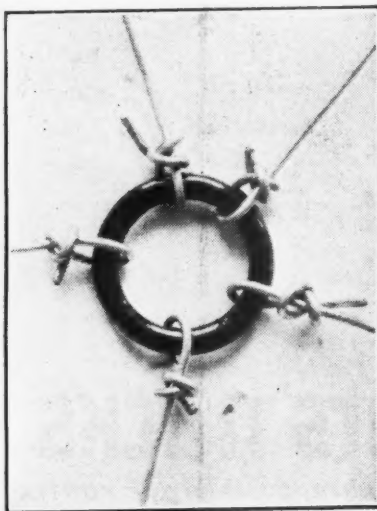
"FRUIT trees often split in the crotches as the result of a heavy load of fruit or a strong wind storm," writes Earl Knebel of Dunkerton, Iowa. He writes as follows concerning his solution of the problem: "I find that the best method of repair is to place screw eyes in the branches that need bracing and then wire the branches together with telephone wire. I find that this is much better than using wire alone, as the wire cuts into the trees. Where three or more branches need bracing, a ring can be placed midway between the branches and wire run from each branch to the ring."

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This page is a place for growers to get together and exchange experiences and ideas. The beginner, as well as the veteran, will find here many practical suggestions for better and more profitable fruit growing. In return for the helps you receive from this page, be ready to pass on, for the benefit of others, any new idea, method or procedure you have developed or run across. Just jot it down as it occurs to you (a postcard will often do) and mail it to the "ROUND TABLE EDITOR," AMERICAN FRUIT GROWER. Don't worry about fancy writing. What the readers of this page want are practical pointers—that are to the point.

## LATHAM RASPBERRIES PROVE PROFITABLE

"LATHAM red raspberries are one of the most profitable crops a farmer can produce," says H. L. W. Hill, president of the Raspberry Growers' Association of Portland, Tenn. He further states: "There are certain lessons about berry growing that must be learned from experience. First of all, any man who hopes to make a success of the berry business might just as well make up his mind to spray his canes at least three times during the season to prevent red rust from



Type of wire and ring bracing described at left by Earl Knebel.

damaging them and ultimately killing the plants. Our experience has shown that it pays to use the half-pint cups for packing and shipping the fruit. A case of 24 half-pint cups will bring almost as much on the Chicago market as a case of 24 pint cups. We cultivate and fertilize our patches well and we make money from our fruit."

## HELPFUL HINTS FOR SPRAYING SEASON

ARNO MYER, proprietor of the Waldo Orchards at Waldo, Wis., sends in some suggestions for fruit growers at spraying time:

"To clean hands and face of spraying material (lime-sulphur and lead) I apply warm lard and then wipe with a dry cloth or soft paper. Soap and water, following this, will cleanse the skin and leave it in fine condition. To shave easily after the beard has been covered with spray, I use any of the waterless shaving creams, and they work fine.

"To make a quick hose repair by wrapping with wire I use about six feet of No. 20 soft wire. Make a loop in each end. Fasten one end to a solid object and take five wraps, loosely, around the hose. Then have someone put a stick through the other loop and draw the wire taut. Roll the hose in either direction and you will find that the wire will wrap tightly about the hose, and a single twist will secure the ends of the wire. Cut off any surplus wire.

"Power sprayers can be used to advantage in making holes in the ground and to clean drains or culverts by attaching a length of quarter-inch pipe at the end of the spray hose and turning on the pressure. The water under pressure will force its way through the hardest clay."

## CITRUS PRODUCER HAS HIGH YIELD

H. F. FERRY of McAllen, Texas, approached a record yield in his orange harvest. His crop totaled 60,620 pounds of oranges from ninety 21-year-old trees. Mr. Ferry says, "My average production on this block of trees which was about 675 pounds per tree was made by using every method I know of to keep the trees in a healthy condition. You have to combine all of the better practices of disease and insect control, soil management and tree care for success with any kind of fruit."

## GROWER HAS PROFITABLE HOBBY

ORCHARDIST A. B. Todd of Vermilion, Ohio, writes, "Although the past winter left me with practically no peaches for this season, I'm glad that the cold weather had no effect on the yield of my hobby which is breeding of pure-bred Scotty dogs. I have a fine litter on hand at the present time."

JUNE, 1936

for  
SOUND,  
CLEAN,  
WORM-FREE  
FRUIT



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Sulfuron\*  
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AS EVERY grower knows, the most important factor in the production of clean, sound, worm-free fruit is to effectively control insect pests.

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Growers throughout the country turn to Dow Products year after year because they know from experience the results they can expect. Like Dow "Mike" Sulfur, each prod-

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